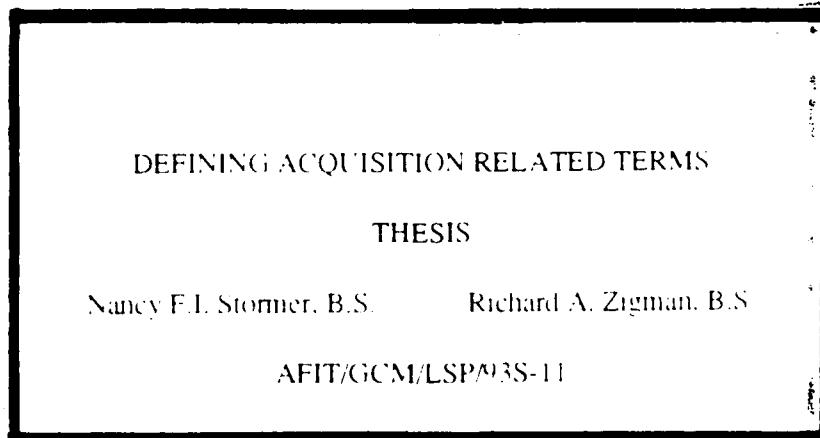


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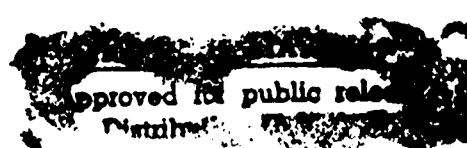


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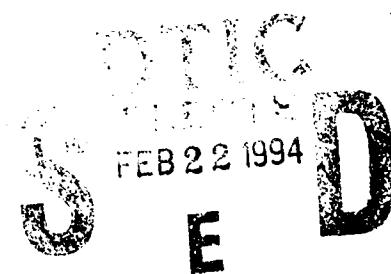
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**DEFINING ACQUISITION RELATED TERMS**

**THESIS**

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AFIT/GCM/LSP/93S-11

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## DEFINING ACQUISITION RELATED TERMS

### THESIS

Presented to the Faculty of the School of Logistics and Acquisition Management  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Contracting Management

Nancy F.I. Stormer, B.S.

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Nancy F.I. Stormer

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Nancy F.I. Stormer

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## **Abstract**

The purpose of this thesis is to provide clear and cogent operational definitions of contracting terms used in today's Federal acquisition environment. This thesis is the last of the current continuing series of research efforts sponsored by the National Contract Management Association (NCMA) with the common goal of creating a dictionary of contracting and acquisition related terms, validated by synthesizing information found in current literature into proposed definitions and surveying proven acquisition authorities for their agreement or comments, thereby arriving at a consensus as to their current usage. This research effort has been conducted by military and civilian Master's candidates at the Air Force Institute of Technology, Wright-Patterson AFB OH and the Naval Postgraduate School, Monterey CA. Survey participants were selected from a current list of Certified Professional Contract Managers (CPCMs) provided by NCMA. A secondary line of comparative research was pursued to identify additional unresearched contracting and acquisition related terms, which are listed in Appendix G and recommended as a basis for possible research in the future.

## **DEFINING ACQUISITION RELATED TERMS**

A definition encloses a wilderness of idea within a wall of words.

Samuel Butler, 1835-1902 (42)

### **I. INTRODUCTION**

The core of the contracting profession is effective communication. In the government contracting field, an organized body of knowledge with a common "language" is the necessary foundation for communication to enhance and facilitate all aspects of the acquisition function. An area of deep concern among contracting professionals on both sides of the negotiating table is the Government's failure to communicate its requirements clearly and accurately to its industry counterparts and, conversely, industry's failure to communicate in such a way that the Government can understand exactly what is being offered.

This research will enhance the contracting body of knowledge by developing consensus definitions of over fifty critical acquisition related terms based on general agreement among contracting professionals on the meaning of commonly used, but critical terms in the government acquisition arena, which are crucial to the negotiation process. Socrates, B.C. 469-399 is believed to have said, "The beginning of wisdom is the definition of terms" (42).

The "Historical Perspective" is provided to refresh the reader's memory as to the magnitude of the problems faced by acquisition professionals in any age. For it is not in just today's world that mankind has had problems in conveying ideas effectively from one to another. Cato, fl.300 A.D. (42), hundreds of years after Socrates, maintained, "The same words conceal and declare the thoughts of men." Things haven't changed much through the centuries. Montaigne, 1533-1592, said, "The word is half his that speaks and half his that hears it" (42), and two centuries after that, Joubert, 1754-1824, is credited with declaring that, "Words, like eyeglasses, blur everything that they do not make more clear" (42). The dual or even plural nature of the meanings we attribute to words is an ongoing barrier to true understanding between parties. Only

by providing definitions that both parties understand, agree to and can act upon, can we surmount that barrier.

### A. Historical Perspective

Peter Tompkins, in his book, *Secrets of the Great Pyramids*, provides an early perspective on the importance of clear communications when he speaks with wonder of "the mind-boggling managerial ability of the Egyptians---the planning, organizing, and controlling that were exercised throughout the 20-year duration of the project." He describes the scene,

Sometime around the third millennium B.C., workers on the Great Pyramid of Cheops set the last stone in place. Certainly they must have felt jubilant for this event represented a major milestone in one of mankind's grandest undertakings. Although much of their technology is still a mystery, the enormity and quality of the finished product remains a marvel. Despite the lack of sophisticated machinery, the ancient Egyptians were able to raise and fit some 2,300,000 stone blocks, weighing 2 to 70 tons apiece, into a structure the height of a modern 40-story building. Each facing stone was set against the next with an accuracy of .904 inch, and the base, which covers 13 acres, deviates less than one inch from level. [65:233-234]

In discussing the magnitude of this effort (which rivals or surpasses many of the major undertakings of the twentieth century), he marvels,

Equally as staggering was the number of workers involved. To quarry the stones and transport them down the Nile, about 100,000 laborers were levied. In addition, about 40,000 skilled masons and attendants were employed in preparing and laying the blocks and erecting or dismantling the ramps. Public works were essential to keep this population employed and fed, and it is estimated that no less than 150,000 women and children had to be housed and fed also. [65:227-228]

The very thought of trying to convey the essence of such a project to an immense number of people from widely varied backgrounds over an extended period of time--and to complete the project with such precision using unsophisticated tools and slave labor is daunting. Clearly, this was no "Tower of Babel," whose ziggurats still exist in ruin at Ur and Erech, their construction cut short by a confusion of tongues. Apparently, the Egyptians had and used an effective means of common communication which made it possible to coordinate and successfully complete one of the

wonders of the ancient world. It was an extraordinary feat that forcefully demonstrates the need for focus and precision in communications as well as the associated ability to understand what is being conveyed when dealing with those from other specialties or functions.

## B. Tying the Past to the Present

In *Managing Business & Engineering Projects: Concepts & Implementation*, John M. Nicholas brings the necessity for effective communication, illustrated by the story of the pyramids, into the 20th century. He provides insight into the nature of the acquisition process then and now, pointing out that, "Broad background is. . .essential. The more highly differentiated the functional areas, the more prone they are to conflict and the harder it is to integrate them" (54:174). This is particularly true in the Department of Defense (DoD) today, where the contracting workforce is tasked with a myriad of far-ranging procurement functions, environments and circumstances in support of military operations across the globe (35:2).

Recent government initiatives to unite acquisition specialists from diverse multi-functional areas into integrated product teams make it incumbent on contracting personnel to know something about all of them, their techniques, procedures and contribution to the acquisition effort. Nicholas directs his comments primarily to project managers, but the basic concepts are just as applicable to contracting professionals. He indicates that, while it is obvious that most [contract negotiators or contracting officers] cannot be authorities "in all functional areas, they must be familiar enough with the basics to intelligently ponder [analyze] ideas offered by specialists in other fields and to evaluate and make appropriate decisions" with regard to what properly belongs in the contract. "They must be informed about contracting terms and implications" (54:174-175) and must be able to communicate with and convince others about the importance and applicability of acquisition related statutes, regulations and policies.

Terre Wilkinson, the author of the "10 Commandments of Negotiations. . ." in discussing what she calls the "coming of age" of negotiations, points out,

. . .as we enter the last decade of the century, negotiation is becoming a primary form of decision making, in business as well as in our personal lives. The broad definition of negotiating--working side by side to achieve mutually beneficial solutions--and the proliferation of literature on the subject are testimony to our increasing awareness of the importance of negotiating skills to the success of both business and personal endeavors. (70:18)

### C. Statement of the Problem

The foundation for any successful negotiation is the usage of a common terminology among contracting professionals on both sides of the negotiating table. Ease and clarity of communication are critical throughout the entire acquisition process. Without a mutual understanding of what is being argued or agreed to there is no meeting of the minds and thus no real contract. In order to meet mission requirements competently, there is a real and pragmatic need for widely accepted definitions of terms that constitute the contracting vocabulary (35:2-3).

After negotiations, Nicholas reminds us that the contract itself may become a source of discord. Any contract that is vaguely worded or poorly specified in terms of cost, schedule, or performance is likely to have multiple interpretations and lead to conflict [54:217]. Not coincidentally, here again the need for continuing development of an unambiguous, systematic body of knowledge [including a common language] to guide and focus requirements in the federal acquisition work force is underscored (35:1).

There is an abundance of literature highlighting the crucial nature of communicating clearly. Indeed, much of the practice of civil law is based on mitigating damages caused by misunderstanding, confusion and misinterpretation. Sometimes miscommunication is intentional as in the case of misrepresentation, fraud, or libel. However, it is more generally the result of ignorance of the specific meanings and/or operational usages attributed to words or terms in the context in which they are used. The research effort set forth in this thesis, and its predecessors, is aimed at alleviating a part of the confusion surrounding the government acquisition process because, in the words of Drs. William C. Pursch and David V. Lamm,

One of the most critical aspects of the contracting profession is effective communication. Almost every function or task performed in contracting seems to be affected by the written or spoken word. (39:41).

#### **D. Process Overview and Purpose**

The acquisition process in the Federal Government is very complex, technical and bureaucratic. Its very nature leads contracting professionals to use specialized terminology or "jargon." In the textbook, *Business Research Methods*, C. William Emory states that, "Jargon no doubt contributes to efficiency of communication among specialists, but excludes everyone else." (27:50). In this same vein, contracting or acquisition jargon contributes to effective communications only if everyone involved has a common understanding of each term. The purpose of this thesis is to provide clear and cogent operational definitions of contracting terms used in today's Federal acquisition environment, by synthesizing information found in current literature into proposed definitions and surveying proven acquisition authorities for their agreement or comments thereby arriving at a consensus as to the proper definitions.

The terms being defined are listed in Chapter II of this thesis, along with the initial synthesized definitions. The thesis will abide by the goals of a satisfactory definition as described in *Keyes Encyclopedic Dictionary of Contract and Procurement Law* (*Keyes*):

1. A definition must give the essence of that which is to be defined.
2. A definition must not be in the negative where it can be in positive terms.
3. A definition should not be expressed in obscure or figurative language.

*Keyes* contends that "these goals ought to be pursued and definitions in government procurement regulations should be ones which continually strive toward these goals." (37:iii)

#### **E. Background of the Study**

In his Master's Thesis entitled, *The Identification of Contracting Terms in Support of the Body of Knowledge*, (September 1990), Captain William J. Hauf developed a "Master Listing" of contracting terms based upon his review of "existing public statutes, regulations, instructions,

policies, dictionaries and lexicons of contracting terminology as to their frequency of use and apparent potential for ambiguity or misunderstanding." He also examined their relevance and importance to the contracting process and their overall practical value to the [contracting] body of knowledge. (35:28)

The terms being defined in this thesis are comprised of the remaining undefined terms on Hauf's master list, maintained by National Contract Management Association Fellows, Dr. William C. Pursch from the Air Force Institute of Technology (AFIT) and Dr. David V. Lamm from the Naval Postgraduate School (NPS), augmented by additional contracting terms identified by the present or previous thesis researchers.

Professionalization of government acquisition personnel has been determined to be a key to implementing the initiatives set forth in the Acquisition Workforce Improvement Act of 1990 (41:28). Improved communications between government and industry is at the core of those initiatives. This thesis effort is a small part of the thrust toward professionalism. Its goal is to lucidly define and arrive at a consensus among a representative sample of contracting experts as to the most applicable definitions (including synonyms and antonyms) of these remaining terms. NCMA plans to publish a dictionary of contracting terms based on the accumulated output of this and past theses.

## F. Investigative Questions

This thesis will attempt to answer the same basic investigative questions used by Cushing & Spalding (listed below) for each of the terms defined.

### *1. What are the current definitions of this term in the existing literature?*

The answer to this question will be found through an exhaustive review of available contracting literature, including regulations, journals, and instructional materials and texts, and existing glossaries and dictionaries, as well as literature and reference materials of a more general nature where appropriate.

2. *Are the definitions found in various sources consistent? Are they complementary? Are there conflicts among published definitions? Do the sources support more than one valid use (meaning) for the term?*

These questions are answered through a critical analysis of the similarities and differences in the definitions offered by the various sources. Where there is disagreement among the various sources as to the meaning of a term, more extensive research into the background of the term is necessary.

3. *Are the published definitions consistent with operational definitions currently in use?*

The answer to this question is obtained through distribution of surveys to recognized contracting professionals. The surveys will measure their level of concurrence with the synthesized definitions developed as a result of the review and critical analysis of the existing literature described above. (61:1-3,1-4)

In addition, this thesis will research and survey a listing of appropriate synonyms and antonyms for each of the acquisition related terms where they are applicable.

## **G. Assumptions and Limitations**

1. The reader is assumed to have a working knowledge of and basic familiarity with the terminology used in government contracting.
2. The literature review is confined to those books, periodicals, statutes and regulations reasonably available to the researchers, and as such is assumed to be representative of that literature available to any party interested in the topic.
3. The scope of the thesis effort is limited to analysis of the acquisition related terms, identified in detail and discussed in Chapter II, in terms of their current usages and/or definitions found in published literature on relevant topics. An additional initiative to identify unresearched terms contained in the *Desktop Guide to Basic Contracting Terms* was undertaken and is the subject of §H of Chapter II.

## **H. Thesis Overview**

This introductory chapter is the first of five chapters. It provides an brief historical perspective of the ongoing need for clear communication and highlights the importance of common terminology among acquisition professionals. It also provides an overview of the research effort being pursued, and outlines the investigative questions as well as assumptions and limitations inherent to such a study. The second chapter provides brief summaries of the analyses resulting from the literature review, the initial synthesized definition, and any synonym(s) or antonym(s) identified for each of the contracting terms researched during the review and analysis of existing publications. Chapter II answers investigative questions one and two as well as tendering initial synonyms and antonyms. It also contains a brief description of the literature review related to previously unresearched acquisition-related terms. Chapter III discusses methodology used in this thesis. In order to maintain consistency with earlier NCMA sponsored thesis efforts to enhance the government contracting lexicon, the methodology used in Chapter III relies heavily on the methodology used in past research efforts. Chapter III also explains how the survey, based on the modified Delphi approach, was developed. Chapter IV explains survey results and changes, if any, to the original Chapter II synthesized definitions and answers investigative question three. Lastly, Chapter V provides a summary of the conclusions reached by the researchers and their recommendations for further research.

## **II. LITERATURE REVIEW**

### **A. Overview**

The literature reviews presented in this chapter encompass several different areas of expertise. Contracting personnel need to be knowledgeable about each to perform their duties effectively. The emphasis found on some of the terms, such as CONCEPT EXPLORATION and DEMONSTRATION AND VALIDATION are an outgrowth of recent changes in the implementation of OMB Circular A-109. Generally, these particular terms are related to the different stages in the life cycle of a major defense acquisition program and are within the purview of the program manager. Their presentation as part of this thesis is the result of the need for understanding of one another's responsibilities and duties among all members of acquisition teams. For example, DOCUMENTATION is an issue of major concern in Configuration Management, however its proposed synthesized definitions also cover the gamut of functional capabilities. PILOT PRODUCTION and MATERIAL REQUIREMENTS PLANNING (MRP) fall under the Production or Manufacturing discipline, as does the term ECONOMIC PRODUCTION RATE. CONTRACT ADVISORY AND ASSISTANCE SERVICES and CONSENT TO SUBCONTRACT are both administrative and post-award in nature.

The current researchers could continue in this vein with each of the terms being defined, however, a glance by the perceptive reader through the list of terms being defined makes it readily apparent that *Figure 2-1, Interdisciplinary Nature of Contracting Management*, which was included in the thesis of Capt William J. Hauf, courtesy of Dr. David V. Lamm and Dr. William C. Pursch and reproduced below, is just as applicable today as it was when he used it (35:13). Recognition of this interdisciplinary nature of the contracting management function has become increasingly more critical since the advent of Integrated Weapon System Management (IWSM) with its associated Integrated Product Teams (IPTs). To be effective, each member of the team must be

conversant in the terminology of the others to make it possible for all members to work together in harmony to acquire the products needed to meet our mission needs.

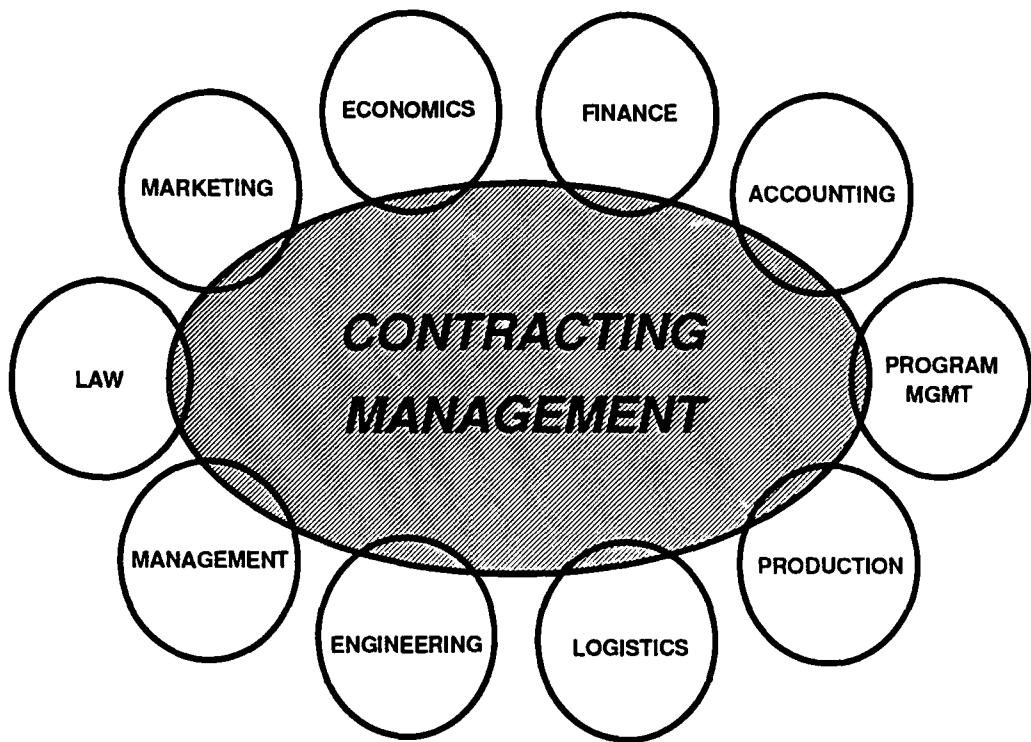


Figure 2-1. Interdisciplinary Nature of Contracting Management  
(Dr. David V. Lamm and Dr. William C. Pursch)

## B. Scope

The scope of the first part of the literature review, contained in §§E and F of this chapter, is limited to research and analysis of the current usage and published definitions for the contracting terms identified below. These terms generally consist of two or more words. The reader is cautioned to remember that the object of this effort is not to define each word in each phrase or term individually, inasmuch as the researchers believe readers of this type of research already have a vested interest in and are knowledgeable about the majority of contracting and acquisition related terminology or jargon in use today. Rather, the intent is to develop an operational definition of each concept in the context of government acquisition and its related disciplines. During the litera-

ture review there were times where there was no specific mention of an identified term. As noted in earlier theses, when this happened, "the term was defined by synthesizing the definitions of the component words using the professional judgment of the researcher based on his/her experience in contracting and understanding of its use in the common contracting parlance" (61:2-2).

Again, because the methodology (described in detail in Chapter III) used to develop this thesis is replicative of earlier research efforts striving toward the same goal, the intent of this effort is restated here:

to develop definitions in support of the contracting body of knowledge, the literature review places particular emphasis on contracting regulations, as well as books and periodicals related to government acquisition. Review of the Bibliography will show that while the foundation of these definitions is overwhelmingly slanted toward these types of publications, literature and reference materials of a more general nature [for example, *The American Heritage Dictionary*] are not excluded from the review, but they are not its primary focus. (61:2-2)

The scope of the second part of the literature review, which is discussed in §H of this chapter, is limited to a review and comparison of the terms contained in the NCMA *Desktop Guide to Basic Contracting Terms* (51), and Hauf's Master List of Contracting Terms (35) as amended by later researchers to identify any terms that have not been subjected to the scientific research method of validation.

## C. Lists of Terms

The list of the terms addressed in this thesis is divided into two parts, Survey A and Survey B, for administrative convenience and ease of review. The terms being defined are addressed alphabetically within each survey. The literature review is also arranged alphabetically by survey.

**Table 2-1: SURVEY A**

Agency Peculiar Property	Educational Service Agreement (ESA)
Architect-Engineering (A&E) Contract	Excess Reprocurement Costs
Co-development	Fair and Equitable
Concept Exploration	Fair and Reasonable Price
Consent to Subcontract	Full Scale Engineering Development
Contract Advisory and Assistance Services (CAAS)	Government Furnished Information (GFI)
Cost/Schedule Control Systems Criteria (C/SCSC)	Greatest Value
Demonstration and Validation	License Agreement
Design/Technical Competition	Long Term Contracting
Documentation	Material Requirements Planning (MRP)
Economic Production Rate (EPR)	Materiel Management
Economic Purchase Quantity	Non-Developmental Item (NDI)
	Pilot Production

**Table 2-2: SURVEY B**

Acquisition Streamlining	Product Baseline
Allocated Baseline	Product Substitution
Baseline Cost Estimating (BCE)	Progress Payment Inventory
Contractor Inventory	Property Administrator
*Experience Curve	Provisioning
Functional Baseline	*Prudent Business Person
Government Purpose License Rights (See "Rights in Technical Data")	Rights in Technical Data
*Initial Provisioning (see Provisioning)	Risk Analysis
Office of Federal Procurement Policy (OFPP)	Risk Management
Plant Equipment	Rule 4 File
Other Plant Equipment (OPE)	Section 8(a) Contract
Industrial Plant Equipment (IPE)	Single Source
Plant Clearance Officer	Substantial Performance
Procurement Planning (See Acquisition Planning)	System Specification Baseline
Product Assurance	Unpriced
	Work Measurement Standards
	*Z-factor

\* See § II. G for explanation of items preceded by an asterisk.

## D. Specialized Citations, Use of Acronyms and Shortened Forms of Titles

Citations for information found in the Federal Acquisition Regulation (FAR) and its associated supplements (*Defense Federal Acquisition Regulation Supplement (DFARS)*, *Air Force Federal Acquisition Regulation Supplement (AFFARS)*, etc.), as well as for the *AFLC Command Dictionary/Directory*, *FOXBEST*, and *Wisdom of the Ages*, are included in the text of this thesis without page numbers. They were located in the FAR-on-Line database or other databases during the literature review and there are no page numbers associated with a database search. Part, Subpart, Paragraph (¶) and Sub Paragraph (Sub¶) numbers are contained in the text for each citation.

Commonly used acronyms and shortened forms of titles are listed below to aid the reader.

**Table 2-3. ACRONYMS OR SHORTENED FORMS OF TITLES**

Acronym/Short Form	Name or Title
AFIT	Air Force Institute of Technology
AFFARS	Air Force FAR Supplement
AFMC FARS	Air Force Materiel Command FAR Supplement
AFR	Air Force Regulation
AFR 57-1	<i>Air Force Mission Needs and Operational Requirements Process</i>
ASC	Aeronautical Systems Center
ASD	Aeronautical Systems Division (now ASC, see above)
ASPM	<i>Armed Services Procurement Manual</i>
Compendium	<i>Compendium of Authenticated Systems and Logistics Terms. Definitions and Acronyms</i>
Desktop Guide	<i>Desktop Guide to Basic Contracting Terms</i>
DFARS	Defense FAR Supplement
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDD 5000.1	<i>Defense Acquisition</i>
DoDI	Department of Defense Instruction
DoDI 5000.2	<i>Defense Acquisition Management Policies and Procedures</i>
FAR	<i>Federal Acquisition Regulation</i>
FAR-on-Line	Database of the <i>Federal Acquisition Regulation</i>
Glossary	<i>Glossary: Defense Acquisition Acronyms and Terms</i>
Keyes	<i>Keyes Encyclopedic Dictionary of Contract and Procurement Law</i>
McCann	<i>Defense Manufacturing Management: Guide for Program Managers</i>
OMB A-109	Office of Management and Budget Circular A-109, titled <i>Major Systems Acquisition</i>
Reference Book	<i>The Government Contracts Reference Book</i>

## **E. Literature Review and Synthesized Definitions for SURVEY A.**

### **I. Agency Peculiar Property**

There is no specific mention of the term AGENCY PECULIAR EQUIPMENT, which was on the original list of contracting terms to be defined, in any of the literature reviewed, however, the *Federal Acquisition Regulation* (FAR) Part 45 defines a similar term, "agency peculiar property," as, "Government-owned personal property that is peculiar to the mission of one agency (e.g., military or space property). It excludes Government material, special test equipment, special tooling and facilities" (28; 29). Nash & Schooner's *Government Contracts Reference Book (Reference Book)* essentially quotes this FAR definition verbatim as does Keyes *Encyclopedic Dictionary of Contract and Procurement Law (Keyes)* (48:16; and 37:31). Consequently, the term being defined was changed from "Agency Peculiar Equipment" to the more commonly used "Agency Peculiar Property."

Both the *FAR* and *Defense Federal Acquisition Regulation Supplement* (DFARS) 245.301 make frequent reference to the term "agency-peculiar property and related support equipment" in the context of providing "military property including end items and integral components of military weapons systems along with related peculiar support equipment to contractors when necessary for use as a standard or model, for testing the contractor's end item where suitable commercial equipment is not available, to establish equipment compatibility, or for other reasons that the contracting officer determines to be in the Government's interest" (20;28).

*Air Force FAR Supplement (AFFARS)* 5345.310 clarifies that Agency-Peculiar Property and related support equipment shall only be provided to a contractor as Government Furnished Property (GFP) for use in contract performance (10; 28).

*The American Heritage Dictionary* defines "equipment" in general terms as "something with which a person, organization, or thing is equipped" (3:482) and FAR Appendix E-103.26, in discussing replenishment parts in the context of the DoD Spare Parts Breakout Program, identifies

"equipment" more narrowly as "aircraft, engines, ships, tanks, vehicles, guns and missiles, ground communications and electronic systems, ground support, and test equipment" (28; 29).

According to FAR 46.203(c)(1) . . . A critical item may be either "peculiar," meaning it has only one application , or "common," meaning it has multiple applications. FAR 46.203(c)(2) goes on to say that noncritical items may also be either peculiar or common (28; 29).

Based on the above, it is clear that the term, AGENCY PECULIAR PROPERTY, is preferred to "Agency Peculiar Equipment." Therefore, Agency Peculiar Equipment is being added as a synonym to the term being defined, which has been changed to AGENCY PECULIAR PROPERTY.

The proposed definition, as synthesized from the above FAR references, is:

Government-owned personal property that is peculiar to the mission of one agency, including end items and integral components of military weapons systems along with related peculiar support equipment, but excluding government material, special test equipment, special tooling and facilities. Agency peculiar equipment may be provided to a contractor as government-furnished property (GFP) for use in contract performance when it is necessary (1) for use as a standard or model, (2) for testing the contractor's end item where suitable commercial equipment is not available, (3) to establish equipment compatibility, or (4) for other reasons that the contracting officer determines to be in the Government's interest.

Synonym: Agency Peculiar Equipment, Related Support Equipment, Peculiar Support Equipment.

Antonym: Common Support Equipment; Common Item(s).

## 2. Architect-Engineering (A&E) Contract

According to FAR 37.101, a "service contract" means a contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply. FAR 36.102 provides the following more specific definition for "architect-engineer services" as set forth in 40 U.S.C. 541:

1. Professional services of an architectural or engineering nature, as defined by State law, if applicable, which are required to be performed or approved by a person licensed, registered, or certified to provide such services;

2. Professional services of an architectural or engineering nature performed by contract that are associated with research, planning, development, design, construction, alteration, or repair of real property; and
3. Such other professional services of an architectural or engineering nature, or incidental services, which members of the architectural and engineering professions (and individuals in their employ) may logically or justifiably perform, including, studies, investigations, surveying and mapping, tests, evaluations, consultations, comprehensive planning, program management, conceptual designs, plans and specifications, value engineering, construction phase services, soils engineering, drawing reviews, preparation of operating and maintenance manuals, and other related services. (28; 29)

FAR 36.601 repeats sub¶ 1. and 2. above; paraphrases sub¶ 3; and adds certain "professional surveying and mapping services of an architectural or engineering nature" to the overall definition of architect-engineer services (28; 29).

Nash & Schooner, in the *Reference Book*, define an ARCHITECT-ENGINEERING (A&E) CONTRACT as, "A Government contract for Architect-Engineer (A-E) Services. Such contracts are entered into using special source selection procedures as required by the Brooks Act ." They briefly discuss the two-phased approach set forth in FAR 36.6, then summarize, "In the first phase, the agency prepares a "final selection list" of firms, in order of preference, that are considered the most highly qualified to perform the services based on all relevant criteria except the fee to be paid for the services," and continue, "In the second phase, the contracting officer negotiates the contract with the most preferred firm on the selection list" while noting that, "If a satisfactory contract cannot be negotiated with this firm, the contracting officer is then permitted to negotiate with the next most preferred firm" (48:29-30). Expanding on the above, Keyes indicates that, "Statutes limit the total compensation--or "fee"--payable to A-E's under Federal Government A-E Services to 6%. Such contracts are exempt from the requirements of formal advertising for bids," and that, "40 U.S.C. § 901 (1972) requires discussions with more than one firm" [37:55].

The FAR definition(s) furnish a useful explanation of "service contract(s)" and give a comprehensive description of the types of services rendered by professional Architect-Engineer(s). As such they are necessary adjuncts to the synthesized definition of an ARCHITECT-ENGINEERING

(A&E) CONTRACT; however, since it is not the object of this effort to define each component word or the underlying basis of the term being addressed, these definitions are not included in the synthesized definition. Nash & Schooner as well as Keyes provide insight into the process necessary to award such a contract. Using the information provided in these definitions, the proposed synthesized definition for the term ARCHITECT-ENGINEERING (A&E) CONTRACT, is:

A two-phased, government contract for professional architect-engineer (A-E) services, subject to, (1) special source selection procedures required by the Brooks Act, and (2) a statutory limitation on total compensation--or "fee."

Synonyms: None.

Antonyms: None.

### 3. Co-development

Stephanie Neumann, in *Offsets, Coproduction, Barter, and Countertrade*, comments that, "throughout the literature, offsets, coproduction, barter, and countertrade are used interchangeably with such terms as "buy backs," "barter," "counterpurchase," "compensation," or "licensed production." Trying to differentiate between them is a frustrating and thankless task." She defines "compensatory trade agreements" as:

agreements that incorporate some method of reducing the amount of foreign exchange needed to buy a military item, or some means of creating revenue to help pay for it. However, many other varieties of compensatory trade agreements exist, and each organization and source uses different and conflicting terminology to refer to them. (55:183)

In the only direct reference to CO-DEVELOPMENT found in the literature review, the *Desktop Guide* pithily defines the term as, "a development project to which more than one government contributes efforts or resources" (51:11). In a related vein, while discussing the benefits of the North Atlantic Treaty Organization's (NATO's) Rationalization, Standardization and Interoperability (RSI) initiatives, Simon Webb, in *NATO and 1992*, indicates that "Cooperation between NATO countries takes many different forms, ranging from direct purchases of equipment 'off-the-shelf' to full collaboration in development and production of new equipment to meet a

common military requirement" (67:7). He later confirms Neumann's hypothesis by noting that, "reciprocal trade agreements are intended to promote cross purchasing between countries" (67:10). Webb elaborates.

Under full collaboration, the defense departments will reconcile as far as possible their detailed military requirements and, often at least as difficult, time-scales. A joint project will then proceed feasibility studies, project definition, full (engineering) development and prototype production. Work on these phases is divided either equally between the partner countries or in proportion to the numbers of equipments to be purchased eventually. Variations to the common design are developed to meet any special national requirements. (67:17)

Virginia Lopez and Loren Yager, in their treatise on *The U.S. Aerospace Industry and the Trend Toward Internationalization*, and the increasing trend toward business relationships that cross national borders, observe,

Joint ventures can involve cooperation in design, production and marketing and, importantly, in the funding of these efforts. . . [as well as] permit companies to expand markets while maintaining selective control of the technological assets . . . They have also made sense for firms that receive technology. Technology is less valuable without the design and development experience and the marketing know-how that can be achieved only through an interactive partnership. (43:7)

They suggest that in recent years, international arms cooperation has become more focused "on dual production of complementary systems and on CO-DEVELOPMENT of systems based on emerging technologies" (43:7).

Taking all of the above into consideration and paraphrasing the definition of coproduction given by Michael Rich, et al., in *Multinational Coproduction of Military Aerospace Systems*, (58:1) the following proposed synthesized definition of CO-DEVELOPMENT is offered:

An international collaboration to which more than one government contributes efforts or resources during the development phase of a major weapon system program.

Synonyms: Collaborative Development, Compensatory Trade Agreement, Cooperative Development, Cooperative Research and Development Program with One or More Allied Nations, Joint Project, Joint Venture.

Antonyms: Joint-Service Development, Service-Unique Development, Agency-Peculiar Development.

#### 4. Concept Exploration

Review of current literature indicates there is no significant disparity between the different definitions of CONCEPT EXPLORATION and that contained in FAR 34.005 with regard to Concept Exploration Contracts. Nash & Schooner define the term in their *Reference Book* as "the process conducted at the beginning of a Major System Acquisition, of refining the proposed concept and reducing the concept's technical uncertainties. This is designated as "Phase 0" of the DoD acquisition process" (48:86). Other sources, including the *Compendium*, essentially concur, building upon one another to conclude that it is a phase or a process or a stage at the beginning of a weapon system's life cycle (AFP 800-7, 15:148) during which comprehensive system studies and experimental hardware efforts are accomplished (AFM 11-1, 15:148) to evaluate and define the feasibility of alternative concepts (AFR 57-1) and to reduce technical uncertainties. FAR 34.005 indicates concept exploration contracts should be subject to limitations on time and subject to planned dollar levels where practicable (28; 29).

The *Student Study Aid* states that it is during the CONCEPT EXPLORATION/Definition Phase that system concepts are defined and selected for further development (2:170). FAR 34.005 continues, "Follow-on contracts for such tasks in the exploration phase shall be awarded as long as the concept approach remains promising, the contractor's progress is acceptable, and it is economically practicable to do so" (28; 29).

The proposed synthesized definition of CONCEPT EXPLORATION which will be subjected to further scrutiny by contracting professionals for consistency with operational usage, follows:

The period, known as "Phase 0," at the beginning of a weapon system's life cycle, generally limited by time and budget, during which comprehensive system studies and experimental hardware efforts are accomplished to evaluate and define the feasibility of alternative concepts and provide the basis for assessing their relative merits at the Milestone I decision point.

Synonyms: Concept Exploration Phase, Concept Exploration/Definition Phase, Phase 0.

Antonyms: None.

## 5. Consent to Subcontract

*Keyes* cites FAR 44.101 verbatim in defining CONSENT TO SUBCONTRACT as "the contracting officer's written consent for the prime contractor to enter into a particular subcontract" (37:55; 28; 29). William Thybony provides the background for this definition in *Government Contracting Based on the Federal Acquisition Regulation (FAR)*, where he refers to lack of privity in the contractual relationship as the basis for CONSENT TO SUBCONTRACT as set forth below:

FAR Part 44 prescribes policies and procedures for government consent to subcontracts and for review, evaluation and approval of contractor's purchasing systems. . . The prime contractor is the party having a direct contractual relationship with the government. There is no such relationship between the government and the subcontractor. In other words, there is no privity of contract between the government and the subcontractor. The law relating to subcontracts is built around this *no-privity rule*. The fact that the prime contract requires advance government consent of a subcontract does not remove the subcontractor from the operation of the no-privity rule. It applies even when the subcontract is subject to all the terms and conditions of the prime contract. (64:344)

The *Reference Book*, under the definition of "subcontract," cites FAR 44.102 and indicates that "consent to subcontract is required when subcontract work is complex, the dollar value is substantial, or the Government's interest is not adequately protected by competition and the type of prime contract or subcontract" (48:380; 28; 29).

The synthesized definition given below relies heavily on FAR 44.101 and .102 which satisfies the need for a generic definition, but provides no insight into the process:

The contracting officer's written consent for the prime contractor to enter into a particular subcontract when the subcontract work contemplated is complex, the dollar value is substantial, or the Government's interest is not adequately protected by competition and the type of prime contract or subcontract.

Synonyms: Advance Notification, Consent Requirement, Contractor Purchasing System Review.

Antonyms: None.

## **6. Contract Advisory and Assistance Services (CAAS)**

The term found in the literature review is CONTRACT ADVISORY AND ASSISTANCE SERVICES in lieu of "Contract Advice and Assistance Services (CAAS)" which was previously identified as a term to be defined. Therefore, the component word "advice" is being changed to the word "advisory," which is more commonly used among contracting professionals.

ASD/PK Policy Letter 92-024 defines "Contracted Advisory and Assistance Service (CAAS)" with nearly identical verbiage to FAR 37.201 as "services, other than those excluded or exempted in subpart 37.2 of the FAR that will support or improve agency policy development, decision making, management, and administration, or to support or improve the operation of management systems" (14; 28; 29).

The *Reference Book*, replicates this definition, but omits the reference to excluded or exempted services. Allowable services are identified by referencing FAR 37.203, which says, "Advisory and assistance services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance" (48:14-15; 28; 29). DFARS 237.280 authorizes award of master agreements in accordance with 10 U.S.C. 2304, but limits their establishment to the types of advisory and assistance services described in FAR 37.203, above.

The *Reference Book* notes a further limitation in that,

To implement OFPP Letter 89-1, FAR 9.507-1(c) requires the inclusion of the "Organizational Conflicts of Interest Certificate---Advisory and Assistance Services" provision in solicitations for advisory and assistance services when the contract amount is expected to exceed \$25,000. (48:14; 28; 29)

Inasmuch as FAR Part 37 provides the basis for definitions of CONTRACT ADVISORY AND ASSISTANCE SERVICES in the other literature reviewed, the following synthesized definition is offered:

Services, other than those excluded or exempted that will support or improve agency policy development, decision making, management, and administration, or support or improve the operation of management systems. Such services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance.

Synonyms:      Advisory and Assistance Services, Contractor Advisory and Assistance Services, Contracted Advisory and Assistance Services, Contract Advice and Assistance Services.

Antonyms:      None.

## 7. Cost/Schedule Control Systems Criteria (C/SCSC)

DoDI 5000.2, Part 11, Section B, Attachment 1, establishes the requirement for a contractor's management control system to "include policies, procedures and methods that are designed to ensure that they will accomplish the considerations reflected herein" (19:11-B-1-1). Nash & Schooner elaborate on this cursory introduction, in the *Reference Book*, to COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC) with the following definition.

A set of 35 criteria that specify the minimum requirements a contractor's management control system must satisfy in order to meet the COST/SCHEDULE CONTROL SYSTEM requirement in certain contracts with DoD. Typically, the criteria apply to major system acquisition programs and subcontracts within those programs. (48:113-114)

Donald L. Grskovich, in his article, *What is C/SCSC?--In English, Please!*, clarifies the intent of DoDI 5000.2, above, as set forth below:

The C/SCSC does not represent a management control system. Rather, the criteria merely specify those minimum requirements a contractor's management control system must satisfy. The criteria were issued with two primary objectives: (1) for contractors to use effective internal cost and schedule management control systems, and (2) For the government to be able to rely on timely and auditable data produced by those systems for determining product-oriented status. . . (33:26)

The analysis in the *Reference Book* breaks the 35 criteria down into five basic groups: organization (5 criteria), planning and budgeting (11 criteria), accounting (7 criteria), analysis (6 criteria), and revisions and access to data (6 criteria) and lists the four basic C/SCSC steps as:

- establishing a baseline with the development of a Work Breakdown Structure (WBS) and an applicable budget down to the lowest work element possible.

- managing the base line, measuring performance as the work is accomplished.
- assessing what is left to be accomplished from the plan, and
- making a projection of the estimate to complete the work" indicating that these steps should produce a reliable estimate of the total cost of a given contract. (48:113-114)

The proposed definition for COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC), as synthesized from a number of definitions found during the literature review follows:

A set of 35 criteria used as minimum standards to evaluate the effectiveness of a contractor's internal policies, procedures and methods with regard to cost and schedule control of a government contract. The C/SCSC do not specifically require any data to be reported to the government, but they do provide for access needed to evaluate the system and monitor its operation during the life of the contract. C/SCSC are required in selected cost type Major Defense Acquisition Program (MDAP) contracts and typically flow down to major MDAP subcontractors.

Synonyms: None.

Antonyms: None.

## **8. Demonstration and Validation**

The DoD *Glossary* provides the most comprehensive definition found in the literature review for the DEMONSTRATION AND VALIDATION phase of the acquisition cycle under the heading "Concept DEMONSTRATION/VALIDATION." This definition, published in 1981, is set forth below:

Normally the second phase in the acquisition process, following Milestone I. Consists of steps necessary to resolve or minimize logistics problems identified during concept exploration, verify preliminary design and engineering, build prototypes, accomplish necessary planning, fully analyze trade off proposals, and prepare contract. The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into full scale development. (Formerly titled Demonstration/Validation.) (22:21)

DoDI 5000.2, Part 3.d., published in 1991, changes the terminology to DEMONSTRATION AND VALIDATION and designates it as "Phase I", indicating that when warranted, multiple design approaches and parallel technologies are to be pursued within the system concept(s) during this phase (19:3-13 to -17). AFFARS 5302.101 adds, "Development as used herein, includes those advanced development efforts (6:3) funds for DEMONSTRATION AND VALIDATION and all engineering and manufacturing development (6:4) funds. This term is applicable to both PEO and DAC

contract actions" (10; 28). The Defense Systems Management College's (DSMCs) *Defense Manufacturing Management: Guide for Program Managers*, by McCann, simplifies the *Glossary* definition by saying that it is the "period when major program characteristics are refined through extensive study and analysis, hardware development, test and evaluations" (44:B-2). These definitions were commingled to form the following proposed synthesized definition:

The second period in the acquisition cycle of weapon system, known as Phase I, during which major program characteristics are refined through extensive study and analysis, hardware development, test and evaluation (including, where warranted, multiple design approaches and parallel technologies). The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into full scale development (FSD). The term is applicable to both Program Element Officer (PEO) Programs and Designated Acquisition Commander (DAC) contract actions.

Synonyms: Concept Demonstration/Validation, Demonstration/Validation, Demonstration and Validation Phase, Phase I.

Antonyms: None.

## 9. Design/Technical Competition

Although none of the literature reviewed specifically referenced the term DESIGN/TECHNICAL COMPETITION, it is clear that competition is the "law of the land" and alternative innovative design concepts are paramount during development programs. The general policy statement of Office of Management and Budget Circular No. A-109 (OMB A-109), strongly advocates competition in the early developmental stages of the life cycle of a major weapon system by expounding on the word compete or one of its derivatives at least 23 times. OMB A-109 contains numerous references to innovation and competition in the acquisition process. It affirms,

¶ 6. The policies of this Circular are designed to assure the effectiveness and efficiency of the process of acquiring major systems. They are based on the general policy that Federal agencies, when acquiring major systems will, a. . . .encourage innovation and competition in creating, exploring, and developing alternative system design concepts; b. . .Place emphasis on the initial activities of the system acquisition process to allow competitive exploration of alternative system design concepts in response to mission needs. . . (56:3)

Follow-on paragraphs require agencies to... ¶ 7.b. "Depend on, whenever economically beneficial, *competition between similar or differing system design concepts* throughout the entire acquisition process". . . and ¶ 9.b. authorizes cognizant agencies to retain the prerogative to make decisions as to "*Selection of competitive system design concepts to be advanced to a test/demonstration phase* or authorization to proceed with the development of a noncompetitive (single concept) system." (56:6-7). However, ¶ 15.b. exacts a "penalty" against an agency's decision to proceed with a single system design concept without competitive selection and demonstration, by requiring disclosure of the basis for the decision to the congressional authorization and appropriation committees (56:11).

The last sentence of ¶ 10.b., declares, "The agency may permit two or more agency components to sponsor *competitive system design concepts* in order to foster innovation and competition" (56:7). . . and all of ¶ 11 endorses competition for *alternative system design concepts* with an emphasis on generating innovation and conceptual competition from industry. Sub¶ 11.d. indicates that R&D efforts "should emphasize early competitive exploration of alternatives, as relatively inexpensive insurance" (56:8). DoDD 5000.1, Part 1, C.2.b., follows up with, "Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk" (18:1-4 to 1-5).

Sub¶ 11.f. of OMB A-109 establishes that,

Selections from *competing system design concept* proposals will be based on review. . . [which] will consider (1) Proposed system functional and performance capabilities to meet mission needs and program objectives, including resources required and benefits to be derived by trade-offs, where feasible, among technical performance, acquisition costs, ownership costs, time to develop and procure; and (2) The relevant accomplishment record of competitors. (56:9)

DoDD 5000.1, C.5., condenses much of the above to read, "Defense systems, subsystems, equipment, supplies and services shall be acquired on a competitive basis to the maximum extent

practicable as a means of achieving cost, schedule, and performance benefits" and Sub¶ b. continues.

The feasibility, cost and benefits of competition *in each phase* of a program's implementation shall be explicitly addressed at each milestone, beginning with the new start milestone decision point. This includes *competition for ideas and technologies in the early phases*, and the use of competitive procedures that provide the greatest benefit to the Government. (18:1-6)

DoDI 5000.2 contains only limited material with regard to "competitive parallel, short-term studies" during the Phase 0 of the acquisition cycle (19:3-7); of the pursuit of "multiple design approaches and parallel technologies" during Phase I (19:3-13); of "competitive prototyping" for ACAT I acquisition strategies (19:3-9, 3-12, 3-15); and of "competitive alternative development and production" throughout the period from the beginning of full scale (engineering and manufacturing) development through the end of the procurement (19:3-9, 3-12, 3-15, 3-19, 3-22, 3-25). An exhaustive On-Line search of the Federal Acquisition Regulations and other current literature elicited no additional references to any of the above terms.

The proposed synthesized definition of DESIGN/TECHNICAL COMPETITION taken from the above referenced excerpts follows:

A phrase sometimes used to denote competition for ideas and technologies in the early developmental stages of a major weapon system life cycle leading to a stable system design. Early competitive exploration of alternatives in the form of *competitive system design concepts* is encouraged in order to foster innovation and conceptual competition from industry. Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk

Synonyms: Alternative System Design Concepts, Competition for Ideas and Technologies, Competitive Alternative Development and Production, Competitive Parallel Short-term Studies, Competitive Prototyping, Competitive System Design Concepts, Multiple Design Approaches and Parallel Technologies.

Antonyms: Single System Design Concept, Sole Source Design/Technology, Use of "proprietary" or "noncompetitive" in relation to translating the user's needs into alternative concepts and a stable system design.

## **10. Documentation**

*The American Heritage Dictionary*, furnishes the following generalized definition for the term DOCUMENTATION:

- 1.a.** The act or an instance of the supplying of documents or supporting references or records. **b.** The documents or references supplied. **2.** The collation, synopsizing, and coding of printed material for future reference. **3.** *Computer Sci.* The orderly presentation, organization, and communication of recorded special knowledge to produce a historical record of changes in variables. (3:414)

DOCUMENTATION as used in the context of the government acquisition process is a word with many "faces" and many uses. There are over two hundred references to the word DOCUMENTATION in the FAR and its associated supplements and appendices alone. It is used in every facet of the acquisition process from the earliest "chicken scratchings" on a notepad signaling the conception of an idea to the exhaustive information and paperwork required by Contract Data Requirements Lists (CDRLs) to manage the configuration of the most sophisticated space borne system. The *Desktop Guide* probably gives the most succinct definition. "Recorded technical data, or a concept in any form from which information can be derived" (51:24).

A review of the available literature indicates that the term DOCUMENTATION is used in such diverse areas as Management, Finance and Accounting, Law, Policies and Procedures, and as justification for a particular action or evidence of compliance.

The *Compendium* addresses some of the areas covered by segmenting the definitions under the umbrella term, DOCUMENTATION and annotating the sources as follows:

- The provision of accounting documents in support of financial and property transactions. (DoD 5000.8)
- Recorded technical data and information. (DoD 5010.12)
- Recorded technical data or a concept in any form from which information can be derived, e.g., a technical report, a page containing data, a graphic or pictorial representation, a tape recording, a book, or a film record. (AR 700-51)
- Documentation consists of packing lists, inspection and test reports, operating and installation instructions, historical records, and diagrams of electrical and hydraulic systems and utility connections. When specified, the documentation

shall include photographs, manufacturing procedures, and other required technical data. (TM 38-260/NAVSUP Pub 523/AFR 71.18/MCO 4870.62/ DSAM 4145.9) (15:236)

The term DOCUMENTATION is also widely used in the area of computer software. In this context, the *Reference Book* notes that DFARS 227.401 states that, "such DOCUMENTATION must be in human-readable form (as distinguished from machine-readable)" (20; 28), followed by the following definition for "computer software DOCUMENTATION": "Recorded information including computer listings and printouts, that (1) documents the design or details of computer software, (2) explains the capabilities of the software, (3) provides data for testing the software, or (4) provides operating instructions." It continues,

Under 10 U.S.C. 2320 and DFARS Subpart Part 227.4, this type of documentation is TECHNICAL DATA for the purposes of allocating the rights of the contracting parties to the information; under FAR Subpart 27.4, it is COMPUTER SOFTWARE for purposes of allocating rights. [FAR 27.4 defines computer software as computer programs, computer data bases, and *documentation* thereof.] Under FIRM 201-4001, it is APPLICATION SOFTWARE. . .for purposes of procurement policy. (48:85-85 & 145)

With regard to the uses of DOCUMENTATION in management, the *Glossary* (1989), provides the definition,

Documents used in managing and reviewing a program, including (for major programs) Mission Need Statement, System Concept Paper, Decision Coordinating Paper, Test and Evaluation Master Plan, Integrated Logistic Support Plan, Acquisition Decision Memorandum, and similar documents used for major programs within the Services and Defense Agencies. (22:39)

Subsequent to publication of the *Glossary*, AFR 57-1 was issued. In ¶ 12.c. it provides an updated listing of current documents in the context of DOCUMENTATION of requirements for management review:

Program documentation will vary for each summit based on subject matter, program maturity, and operational and developmental issues outstanding. As a minimum, the [Mission Needs Statement] MNS, [Operational Requirements Document] ORD, [Requirements Correlation Matrix] RCM, [System Maturity Matrix] SMM, [Test & Evaluation Master Plan] TEMP, and [Acquisition Program Baseline] APB are required. . .Other documentation may also require update. (11:26)

*Black's Law* defines DOCUMENTATION in the legal context of "Documentary Evidence" as:

evidence derived from conventional symbols (such as letters) by which ideas are represented on material substances. Such evidence is as furnished by *written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for the purpose*, as distinguished from "oral" evidence, or that delivered by human beings *viva voce*. *People v. Purcell*, 22 Cal.App2d 126, 70 P.2d 706, 709, See also Authentication; Document. (6:482).

The *National Estimator*, Special Edition, and the National Estimating Society's *Dictionary of Cost Estimating Terms and Phrases*, Second Edition, provide identical insight into the definition used in the financial and accounting communities, "The summary and backup data which supports a cost estimate. The files maintained for historical support until a contract is closed out" (53:40 and 52:53). AFFARS 5345.310, in a discussion of government furnished property, provides the following procedural statement with regard to fund accountability: "Funds shall be identified in the contract by identifiable tasks as control line items that clearly separate funding responsibilities and which require separate contract line item accounting and voucher payment DOCUMENTATION" (10; 28). AFFARS 5315.891notes in ¶ (b). "Explicit and timely DOCUMENTATION and feedback on the final disposition of audit reports are essential" and identifies the price negotiation memorandum (PNM) as existing DOCUMENTATION in ¶ (c) (10; 28).

Various policy letters issued by Aeronautical Systems Center (ASC, formerly ASD) address policy and procedural issues. These include, but are not limited to,

- procedural DOCUMENTATION in connection with "Manpower Policies and Procedures for Commercial Activities Program."
- acquisition strategies and associated DOCUMENTATION for MDAPS and other programs. . .basis and rationale for these decisions must be documented and represent good business sense.
- DOCUMENTATION in justification of weightings in the Source Selection Plan or PNM.
- DOCUMENTATION reviews. . .in connection with the IG.
- DOCUMENTATION concerning rates of change that will be required in PNMs.

- PR DOCUMENTATION that evidences compliance with applicable statutes, regulations and policies.
- Uncertainties regarding pricing DOCUMENTATION and the requirement to submit certified cost or pricing data in source selections. (12; 28)

Examples of the diverse uses of DOCUMENTATION include FAR 17.205, which obliges the contracting officer to justify in writing the quantities or the term under option, the notification period for exercising the option, and any limitation on options price under 17.203(g); and to include the justification document in the contract file; FAR 15.612, which requires supporting DOCUMENTATION to be prepared for the source selection decision; FAR 9.105, which directs that, "Documents and reports supporting a determination of responsibility or nonresponsibility, including any preaward survey reports and any applicable Certificate of Competency, must be included in the contract file; and FAR 15.612, (Formal Source Selection), which enjoins government contracting personnel to prepare and maintain supporting DOCUMENTATION for the selection decision (28; 29).

Finally, DoDI 5000.2, Part 9, § A, 3.g., DOCUMENTATION, gives procedural direction that, "Configuration records for each configuration item will be established when the applicable configuration baseline is established. These records will include both current and historical information to ensure traceability from the initial baseline" (19:9-A-3).

The abundance of information contained in the above documents indicates that the term DOCUMENTATION is not a simple one to synthesize in the context of government contracting. Therefore, the proposed synthesized definition contains several distinct sections as follows:

Recorded technical data or special knowledge or concepts:

- *General* - from which information can be derived. Examples: technical reports, a page containing data, a graphical or pictorial representation; a tape recording, a book, or a film record; packing lists, historical records; and diagrams of electrical and hydraulic systems and utility connections.
- *Computer Software* - including computer listings and printouts, that (1) documents the design or details of computer software, (2) explains the capabilities of the software, (3) provides data for testing the software, or (4) provides operating instructions.

- *Configuration Management* - established when the applicable configuration baseline is established, including both current and historical information to ensure traceability from the initial baseline.
- *Contractual* - maintained in a contract file which supports the acquisition action being taken or evidences compliance with statutes, regulations and policies. Examples: Price Negotiation Memorandum (PNM); Purchase Request (PR); Acquisition Strategy; and Acquisition Plan; and files maintained for historical support until a contract is closed out.
- *Financial and Accounting* - provided or maintained in support of financial and property transactions. Examples: summary and backup data to support a cost estimate; files maintained for historical support until a contract is closed out; accounting and voucher payment documents; documents to be reviewed by the Inspector General (IG); and rates of change required in PNMs.
- *Legal* - written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for the purpose. Examples: contracts; contract files; accounting records; and other documents of an evidentiary nature.
- *Management* - used in managing and reviewing a program. Required documents will vary for each review based on subject matter, program maturity; and, operational and developmental issues outstanding. Examples: Mission Needs Statement (MNS); Operational Requirements Document (ORD); and Acquisition Program Baseline (APB).
- *Policies and Procedures* - recorded or maintained to evidence compliance with applicable policies and procedures. Examples: a justification of weightings in the Source Selection Plan (SSP) or Price Negotiation Memorandum (PNM); a document justifying the exercise of an option or any limitation on an option price; and a determination of responsibility or nonresponsibility.
- *Technical Data* - for the purposes of allocating the rights of the contracting parties to the information.

Synonyms: Support, Evidence.

Antonyms: None.

## **11. Economic Production Rate (EPR)**

In the only direct definition of the referenced term found during the literature review, the *Glossary* characterizes an ECONOMIC PRODUCTION RATE (EPR) as "The most economically feasible rate at which an end item can be manufactured" (22:42).

Definitions for related terms include:

*Defense Manufacturing Management: Guide for Program Managers*, which provides insight into the determination of "economic lot size" in the manufacturing process with the following:

That number of units of material or a manufactured item that can be purchased or produced within the lowest unit cost range. Its determination involves reconciling the decreasing trend in preparation unit costs and the increasing trend in unit costs of storage, interest, insurance, depreciation, and other costs incident to ownership, as the size of the lot is increased. (44:B-5)

The *AFLC Command Dictionary/Directory* in defining "economic production quantity" states that it is "The maximum number of units that can be produced while allowing for maximum amortization of tooling set up, and minimum material purchase requirements" (9:294).

In the context of *Multiyear Contracting Procedures*, FAR 17.103-1(a)(2) indicates that "The minimum need for the item to be purchased is expected to remain substantially unchanged during the contemplated contract period in terms of *production rate*, acquisition rate, and total quantities" (28; 29). DFARS 217.103-1(a)(ii), sets out the only mention of the term ECONOMIC PRODUCTION RATE found in an On-Line search of the FAR. It narrows this definition with "a production rate at not less than minimum ECONOMIC PRODUCTION RATES given the existing tooling and facilities (10 U.S.C. 2306(h)(9))" (20; 28).

DFARS 217.202 and 252.217-7001(b) add no value to the definition of this term since they merely provide for acceleration "of the contractor's *production rate* in accordance with a surge production plan or a delivery schedule provided by the contractor under the terms of the contract" in the context of surge options to support the Industrial Preparedness Production Planning program (see subpart 208.72)" (20; 28).

The proposed synthesized definition for ECONOMIC PRODUCTION RATE is taken verbatim from the definition supplied by the *Glossary*, as noted above:

The most economically feasible rate at which an end item can be manufactured.

Synonyms: Economic Production Quantity.

Antonyms: Accelerated Production Rate.

## 12. Economic Purchase Quantity

FAR 7.203, 13.107(d), 14.212, and 15.415 require contracting officers to insert and comply with the provision at 52.207-4(a) and (b) below, entitled ECONOMIC PURCHASE QUANTITY -- Supplies, in solicitations for supplies:

(a) Offerors are invited to state an opinion on whether the quantity(ies) of supplies on which bids, proposals or quotes are requested in this solicitation is (are) economically advantageous to the Government.

(b) Each offeror who believes that acquisitions in different quantities would be more advantageous is invited to recommend an ECONOMIC PURCHASE QUANTITY. If different quantities are recommended, a total and a unit price must be quoted for applicable items. An ECONOMIC PURCHASE QUANTITY *is that quantity at which a significant price break occurs. If there are significant price breaks at different quantity points, this information is desired as well.* (28; 29)

According to FAR 7.204(a), the intent is, "to assist inventory managers in establishing and evaluating economic order quantities for supplies under their cognizance" (28; 29). The classification of the term ECONOMIC PURCHASE QUANTITY as a subset of "economic order quantity" indicates that the two terms are related, but not synonymous as initially indicated by the parenthetical reference in the term to be defined. This statement is strengthened by ¶ (b) thereof, which states in part,

In recognition of the fact that ECONOMIC PURCHASE QUANTITY data furnished by offerors are only one of many data inputs required for determining the most economical order quantities, contracting officers should generally take no action to revise quantities. . . [unless] significant price variation is evident from offeror responses, and the potential for significant savings is apparent (28; 29).

As a result, the additional references to "economic order quantity" which were originally researched during the literature review as synonyms are considered moot in the formulation of the proposed synthesized definition of ECONOMIC PURCHASE QUANTITY, as set forth below:

That quantity of an item, identified by offerors, at which a significant price break occurs. It is one of many data points used by inventory managers in establishing and evaluating economic order quantities for supplies under their cognizance.

Synonyms: None.

Antonyms: None.

### **13. Educational Service Agreement (ESA).**

DFARS 237.7201(a) sets forth the definitive meaning for an EDUCATIONAL SERVICE AGREEMENT in regard to contracting for such services by the Government. It states that an EDUCATIONAL SERVICE AGREEMENT is not a contract, but "is an ordering agreement under which the Government may order educational services." Conditions for their acquisition are contained in ¶ (b), which is set forth below:

(b) EDUCATIONAL SERVICE AGREEMENTS provide for ordering educational services when --

(1) The Government pays normal tuition and fees for educational services provided to a student by the institution under its normal schedule of tuition and fees applicable to all students generally; and

(2) Enrollment is at the institution under the institution's normal rules and in courses and curricula which the institution offers to all students meeting admission requirements. (20; 28)

The literature review elicited no further definition or context from which to form a definition, therefore, the proposed synthesized definition, taken from DFARS 237.7201(a) is:

An ordering agreement, not a contract, under which the Government may order educational services.

Synonyms: None.

Antonyms: None.

### **14. Excess Reprocurement Costs**

Amavas & Ruherry, in their *Government Contract Guidebook*, identify the term EXCESS REPROCUREMENT COSTS as, "Costs that the Government is entitled to charge a defaulted contractor to cover the difference between the price of the defaulted contract and the price the Gov-

overnment is required to pay to the reprocurement contractor for the defaulted quantity of supplies, services, or unfinished work" (5:GL-10). Nash & Schooner agree in essence, citing FAR 49.402-6 which "requires the contracting officer, after the default termination, to repurchase against the account of the contractor as soon as practicable and, after payment for the work to complete the contract, make a written demand on the terminated contractor for the total amount of the excess" (48:160; 28; 29). The *Desktop Guide* concurs with prevailing opinion and authority with, "The contractor is liable to the government for any excess costs incurred by the government to repurchase supplies or services similar to those terminated for default" (51:26).

*Keyes*, on "Reprocurement," adds that, a "defaulted contractor may properly compete on a reprocurement, and award to such contractor-bidder may be proper if its bid is so low and not in excess of its defaulted contract price." In *Keyes*, 54 Comp. Gen 853 (1975) is cited in support of the above interpretation as follows: "There is no prohibition against the defaulted contractor being considered for award if it is otherwise responsible. Such consideration is consistent with the government's obligation to mitigate damages" (37:18).

AFFARS 5349.402 discusses some procedural aspects of a determination to reprocure supplies or services against a defaulted contractor's account and, in sub§ -6, indicates that, "The contracting officer may not waive the defaulted contractor's liability for any additional costs to the Government of the subsequent reprocurement of supplies or services." It continues, however,

.. Unreasonable delay in reprocurement, reprocurement on the basis of a specification which is materially changed, or reprocurement prior to the issuance of the default notice to the contractor may release a contractor from liability for additional costs" (10; 28).

The proposed synthesized definition of the term EXCESS REPROCUREMENT COSTS, excluding the above conditions, which may be examined by in-depth perusal of the FAR, its supplements and other current literature, is:

Any excess costs incurred by the government to repurchase supplies or services similar to those terminated for default.

Synonyms: Excess Costs of Reprocurement, Defaulted Contractor's Liability for Excess Costs.

Antonyms: None.

## 15. Fair and Equitable

The literature search for this term elicited only two references to the term FAIR AND EQUITABLE, one in the FAR and the other in the AFFARS. These references are set forth below to set a contextual scenario in which to synthesize the definition for this term.

FAR 1.602-2. Responsibilities. Contracting Officers are responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. In order to perform these responsibilities, contracting officers should be allowed wide latitude to exercise business judgment. Contracting officers shall --

- (a) Ensure that the requirements of 1.602-1(b) have been met, and that sufficient funds are available for obligation;
- (b) Ensure that contractors receive impartial, FAIR, AND EQUITABLE treatment; and
- (c) Request and consider the advice of specialists in audit, law, engineering, transportation, and other fields as appropriate (28; 29).

AFFARS 5349.305-1(a). The standard termination clause for cost reimbursement contracts (FAR 52.249-6) provides that the TCO and the contractor negotiate the settlement of the fee. Any method which is FAIR AND EQUITABLE to both parties may be used. When the parties are unable to agree on the adjustment, the percentage of completion formula contained in the contract clause should be used. (10; 28)

It is apparent from reading these two references that the contracting officer has not only the right to determine what is fair and equitable with regard to a particular contractual circumstance, but also the responsibility to carry it out impartially, i.e., in a way that is free of favoritism or bias. *The American Heritage Dictionary* provides the following definitions of the synonymous component words "fair," "equity," and "equitable."

- FAIR. 8. Free of favoritism or bias; impartial: a fair judge. Synonyms: fair, just, *equitable*, impartial, unprejudiced, unbiased, straightforward, objective, dispassionate. These adjectives mean showing no evidence of favoritism, self-

interest, or the indulgence of one's likes and dislikes. Fair, which has the widest range, can imply any of the foregoing senses. (3:486)

- EQUITY. 1. The state, ideal or quality of being just, impartial, and *fair*. 2. Something that is just, impartial, and fair. (3:462)
- EQUITABLE. 1. Exhibiting or characterized by equity; impartial or reasonable in judgment or treatment. (3:462)

Based on perusal of current literature, the following synthesized definition of the term,

**FAIR AND EQUITABLE**, is proposed:

A term used to denote impartiality and reasonableness in the exercise of business judgment by government contracting officers in the performance of their official duties with regard to contractors.

Synonyms: Fair and Reasonable.

Antonyms: None.

## **16. Fair and Reasonable Price**

The 1975 version of *The Armed Services Pricing Manual (ASPM) No. 1*, at page 2B10, indicates that to be fair and reasonable to both parties, the price must represent a reasonable compromise between the seller's and buyer's view of what is fair, considering the promised quality and timeliness of contract performance (16:2B10). In the intervening years between 1975 and 1986 the definition set forth in the *ASPM* changed only slightly, to read, "a price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance." It continues, "Although generally a FAIR AND REASONABLE PRICE is a function of the law of supply and demand, there are statutory, regulatory, and judgmental limits on the concept" (17:B-5). The latter definition was quoted verbatim in three other sources, the *Reference Book* (48:168), the *Desktop Guide* (51:27), and *Contract Management: Post Award* (60:436-437) all of which were thoroughly reviewed during the literature search.

The requirement to arrive at a FAIR AND REASONABLE PRICE starts at Source Selection, where FAR 15.610(a) allows that,

written or oral discussion need not be applied in acquisitions. . .in which it can be clearly demonstrated from the existence of full and open competition or accurate prior cost experience with the product or service that acceptance of the most favorable initial proposal without discussion would result in the lowest overall cost to the Government at a FAIR AND REASONABLE PRICE. . . (28; 29)

FAR 15.802(b) requires contracting officers to "ensure that supplies and services are purchased under negotiated contracts at FAIR AND REASONABLE PRICES" (28; 29), while FAR 15.803(c) provides that, "price negotiation is intended to permit the contracting officer and the offeror to agree on a FAIR AND REASONABLE PRICE." However, it goes on to note "the contracting officer should not become preoccupied with any single element and should balance the contract type, cost, and profit or fee negotiated to achieve a total result and price FAIR AND REASONABLE to both the Government and the contractor" (28; 29).

Under the heading "prohibitions," DFARS 227.402-71(b)(2) points out that there is nothing to prohibit "agreements which provide the Government with greater rights than it would otherwise be entitled to, for a FAIR AND REASONABLE PRICE," and if all else fails in the pursuit of a FAIR AND REASONABLE PRICE, DFARS 252.237-7014(c) authorizes the contracting officer to "determine a FAIR AND REASONABLE PRICE. . ." (20; 28), and FAR 15.803(c) specifically states, "The contracting officer is responsible for exercising the requisite judgment and is solely responsible for the final pricing decision. . ." (28; 29).

Nothing located in the FAR, its supplements, or any of the other literature surveyed, contradicts the ASPM definition of FAIR AND REASONABLE PRICE. Considering this fact and its enduring qualities over the years, this definition is used, in a slightly reworded form, as the proposed synthesized definition for this well-used term:

A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance and also considering any applicable statutory, regulatory, or judgmental limitations.

Synonyms: Fair and Equitable Price.

Antonyms: Overpricing.

## **17. Full Scale Engineering Development**

Although numerous references were found in the literature review to the term "full scale development," only two places in the FAR-on-Line database actually discuss the related term FULL SCALE ENGINEERING DEVELOPMENT. DFARS 235.001, under the heading "R&D CONTRACTING," defines "Engineering development" as "those projects in FULL-SCALE ENGINEERING DEVELOPMENT, but which have not yet received approval for production or had production funds included in the DoD budget submission for the budget or subsequent fiscal year." It labels the latter stages "operational system development," which is defined as "those projects still in FULL-SCALE ENGINEERING DEVELOPMENT, but which have received approval for production through Defense Acquisition Board or other action, or production funds have been included in the DoD budget submission for the budget or subsequent year" (20; 28).

It appears from the sources surveyed that the term FULL-SCALE ENGINEERING DEVELOPMENT (FSED) has been essentially superseded by the term, "Engineering and Manufacturing Development (EMD)" to denote the third phase, known as Phase II, in the DoD major system acquisition process. However, for major line item projects which appear as RDT&E costs of weapons systems elements in other programs, the FULL-SCALE ENGINEERING DEVELOPMENT term remains intact. In this case, program control is exercised by review of the individual projects.

The *Reference Book* uses DFARS 234.001 (above) and DoD Directive 5000.2, *Defense Acquisition Management Policies and Procedures*, 23 Feb 1991, Part 3, as the basis for its definition of this term in the context of the major system acquisition process as do the *Desktop Guide*, the *Compendium*, the *Glossary*, the *Student Study Aid* and the *Defense Manufacturing Management: Guide for Program Managers*. All concur on the following definition for "full scale development" with only minor wording differences:

The period when the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output is, as a minimum, a preproduction system that closely approximates the final product, the documentation necessary to enter the production phase, and the test results that

demonstrate that the production will meet stated requirements. (48:199; 20; 26; 19:3-18 to 3-22; 51:31; 15:309; 22:52; 2:175; 21:B-6)

This definition is further supported in DoD Directive 5000.2 where it says, "Its objectives are to (1) translate a promising design approach into a stable, producible, and cost-effective system design; (2) validate the manufacturing or production process; and (3) demonstrate through testing that the system will meet stated requirements" (19:3-21).

Dr. Norman Ware, in his *Student Study Aid*, provides further insight into the purpose of "full scale development" as follows:

The purpose of the FSD phase is to provide the design documentation necessary to go to full rate production and the ILS documentation necessary to field and fully support the system. This is done by completing detailed design, and by demonstrating that reliability, producibility, supportability, testability, and performance requirements have been met. . .The output of FSD is a tested design that meets contract requirements and the documentation necessary to enter the Full Rate Production/Deployment (P/D) and the Operation and Support (O/S) phases. (2:175)

This excerpt is supported by the *Compendium*, which states in part, "The intended output is a hardware model, a defined logistic support system, and the documentation needed to produce for inventory use (AFP 800-7)" (15:309).

OMB A-109 merely reiterates that, "full-scale development, including limited production, may be approved when the agency's mission need and program objectives are reaffirmed and competitive demonstration results verify that the chosen system design concept(s) is sound" (56:10). DoD 5000.2, Part 3.f. emphasizes the critical need for effective risk management during this phase (19:3-20). Other references found in the FAR and its Supplements deal with broader issues such as the timeline and general scope for submission of proposals going into full scale development.

Inasmuch as the literature revealed sufficient support for more than one definition, two synthesized definitions are proposed for the term, FULL SCALE ENGINEERING DEVELOPMENT, as follows:

The third period, known as "Phase 2," in a weapon system's life cycle, during which the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output includes a pre-production system that closely approximates the final product, the design docu-

mentation necessary to enter the production phase and the integrated logistics support documentation necessary to field and fully support the system, as well as test results that demonstrate that the production will meet stated requirements. Effective risk management is critical throughout this phase.

Synonyms: Full Scale Development, Engineering and Manufacturing Development, Phase 2.

Antonyms: None.

For Research & Development contracting, there is a distinction between "engineering development" and "operational development" as to the status of projects with regard to their approval to proceed into production and the availability of production funding in the applicable DoD budget submission. All items in this area are major line item projects which appear as RDT&E costs of weapons systems elements in other programs. Program control is exercised by review of the individual projects.

Synonyms: Engineering Development, Operational Development.

Antonyms: None.

## **18. Government Furnished Information (GFI)**

On a general level, information is defined as "knowledge derived from study, experience, or instruction" (3:660). In the search for a working definition of the term, GOVERNMENT FURNISHED INFORMATION (GFI), there were only two specific references found. In the context of "contents of written acquisition plans," FAR 7.105(b)(14), GOVERNMENT FURNISHED INFORMATION, requires a discussion of "any *Government information*, such as manuals, drawings, and test data, to be provided to prospective offerors and contractors" (28; 29). Under the heading performance risk, DFARS 215.971-2(d)(ii) permits the contracting officer to "assign a value significantly below normal for -- (C) Rote Entry or routine integration of GOVERNMENT FURNISHED INFORMATION" (20; 28).

The most common denotation found which is related to this topic is for "government-furnished property (GFP)" which is defined as "Property in the possession of or directly acquired by the Government that is subsequently delivered or otherwise made available to the contractor" (FAR 45.101 [28; 29]; 51:32; 21:55; 44:B-7). The *Reference Book* indicates, "GFP is included in

the broad term Government Property, which is subject to the policies and procedures of FAR Part 45." (46:206) which contains detailed guidance on the management of such property. The FAR and its supplements also address such issues as contractor liability and responsibility for government property in its possession and procedures for the contractor to follow if inadequacies or defects are identified in GFP made available by the Government. In the latter event the PCO is required to "determine the validity and extent of the deficiencies. . ." (28; 29).

FAR 52.245-2(a) makes a subtle distinction between GFP and GFI where it says,

The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule or specifications together with *any related data and information* that the Contractor may request and is reasonably required for the intended use of the property" (28; 29),

however, the researchers believe that this distinction is made merely for clarification.

Therefore, the following synthesized definition is proposed for use with the term  
**GOVERNMENT FURNISHED INFORMATION:**

Written knowledge, including documentation such as manuals, drawings, and test data or mapping, charting and geodesy property, which is in the possession of or directly acquired by the Government, and that is subsequently delivered or otherwise made available to the contractor.

Synonyms:      Government Property, Government Furnished Property (GFP) , Government Furnished Material (GFM), Government Furnished Data (GFD).

Antonyms:      Contractor Acquired Property (CAP), Contractor Furnished Equipment (CFE), Contractor Inventory.

## **19. Greatest Value**

AFMC FARS 5352.215-9003(a) requires notification to the contractor that, "the contract award decision will be based on the contracting officer's judgment as to which offer provides the GREATEST VALUE price, price related factors including required delivery schedule, complexity of items, criticality of items, size of order. . ." (28; 29). In further discussion about the AFMC Blue

Ribbon Contractor Program, AFMC FARS 5352.215-9004 reiterates more explicitly with regard to the concept of GREATEST VALUE :

price, price related factors including required delivery schedule, complexity of items, criticality of items, size of order (quantity, dollar value, contractor's plant capacity), need for first article, absolute dollar difference, and new contractors, past quality and delivery performance, and overall cost to the government are evaluated, and award is made to the offeror that in the contracting officer's judgment, provides the GREATEST VALUE. While price is the primary evaluation factor, offerors are advised that award may be made to other than the low price offeror. Past performance with the soliciting contracting activity in the areas of quality and delivery will be evaluated using data immediately available to the contracting officer, including the contracting office's Blue Ribbon Contractor List. (28; 29)

For those contracts which do not fall under the Blue Ribbon Contractor Program, FAR 15.605(c), reinforces the authority of the contracting officer's judgment, when it says,

While the lowest price or lowest total cost to the Government is properly the deciding factor in many source selections, in certain acquisitions the Government may select the source whose proposal offers the GREATEST VALUE to the Government, in terms of performance and other factors. (28; 29)

In making the determination of which offerors are within the competitive range, FAR 15.609(d), indicates in part that, "if the contracting officer initially solicits unpriced technical proposals, they shall be evaluated to determine which are acceptable to the Government or could, after discussion, be made acceptable." It continues,

After necessary discussion of these technical proposals is completed, the contracting officer shall (1) solicit price proposals for all the acceptable technical proposals which offer the GREATEST VALUE to the Government in terms of performance and other factors and (2) make award to the low responsible offeror, either without or following discussion, as appropriate. . . (28; 29)

At FAR, Appendix A, Line 511 within the 1417-line document, which deals with acquisition of Federal Information Processing (FIP) the following is furnished, "The most advantageous alternative means the alternative that provides the GREATEST VALUE to the Government over the system life in terms of price, cost, quality, performance, and any other relevant factors" (28; 29).

Based on its brevity, clarity and applicability to any area of government contracting, this latter definition, as paraphrased below, is the basis for the following proposed synthesized definition:

The most advantageous alternative to the Government, in the judgment of the contracting officer, over the system life in terms of price, cost, quality, performance, and any other relevant factors.

Synonyms:      Most Advantageous Alternative.

Antonyms:      Low Price Offeror.

## **20. License Agreement**

The DoD *Glossary* provides the following with respect to the words, *license* or *permit*: "A privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a *license* is used" as extracted from AFR 67-4 (22:389).

The *Black's Law Dictionary* definition of *license* is, in part,

A legal instrument granting permission to do a particular thing, to exercise a certain privilege, to carry on a particular business, or to pursue a certain occupation. When granted by an appropriate government body, licenses are permits allowing a person, firm, or corporation to pursue some occupation or business, subject to regulation. (6:919-921)

The *Reference Book* concurs with this definition and adds:

Under the Permits and Responsibilities Clause in FAR 52.236-7, construction contractors bear the responsibility for obtaining necessary licenses and permits and complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of the work on fixed-price construction or dismantling, demolition or removal-of- improvements contracts. (48:244)

Interestingly enough, none of the above definitions alludes to use of the term "license" with reference to patents or royalties or rights in data, technical data and computer software, when over forty per cent of the ninety-one documents found during a search of the FAR-on-Line database were specifically in reference to these areas of concern in government contracting. NCMA's

*Desktop Guide* did however, supply the following definition of "Exclusive (Non-Exclusive) License," which appears to provide adequate coverage with regard to exclusivity.

A license covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licenses or the licensor [MSA]. (51:26)

DFARS 252.227-7013(a)(17) indicates that, "In addition, restricted rights include any other specific rights not inconsistent with the minimum rights in (a)(17)(i-iv) above that are listed or described in the contract or described in a LICENSE AGREEMENT made a part of the contract." DFARS 252.227-7013(b)(3), says, "Unless otherwise agreed, the Government shall have limited rights in. . .[sub§ (iii)] Technical data listed or described in a *license agreement* made a part of the contract and subject to conditions other than those described in the definitions of limited rights." It tempers this with, "Notwithstanding any contrary provision in the *license agreement*, the Government shall have the rights included in the definition of "limited rights in paragraph (a)(15) above." DFARS 252.227.7013 also mandates that the contractor is not permitted to place any legend on computer software indicating restrictions on the Government's rights unless the restrictions are set forth in a License Agreement made a part of the contract prior to the delivery date of the software (20; 26).

The above provisions make it clear that a LICENSE AGREEMENT may be made an integral part of the contract used to describe the Government's rights to and/or conditions placed upon use or distribution of such data. For instance, ASD/PK Policy Letter 91-053 prohibits the Air Force from purchasing compilers which by LICENSE AGREEMENT restrict the distribution of Air Force development application programs in order to assure that the Air Force can distribute compiled Air Force application programs without incurring a liability for license fee payments for every computer on which the program will be used" (13; 28).

With regard to notices:

(a) for patents, FAR 27.204-3 requires the contracting officer to include a notice of license, the patent number, and royalty rate recited in the license, when (s)he is aware that the Government is obligated to pay a royalty on a patent because of a LICENSE AGREEMENT between the government and a patent owner (28; 29); and

(b) for restricted rights, DFARS 52.227-19(c)(4) requires the contractor, to the extent feasible, to affix a notice to any restricted computer software delivered under a purchase order/contract. If the contractor does not comply, the Government has that right. The notice shall state, "Notwithstanding any other lease or LICENSE AGREEMENT that may pertain to, or accompany the delivery of, this computer software, the rights of the Government regarding its use, reproduction and disclosure are as set forth in Government Contract (or Purchase Order) No. \_\_\_\_\_" (20; 28).

From the above, it is apparent that this is another multiple-definition word which depends on the context in which it is used for understanding of the meaning. The definitions for the term LICENSE AGREEMENT are set forth below in alphabetical order by context identified.

- License Agreement, Foreign :

A license covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licenses or the licensor

- License Agreement, General:

A privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a *license* is used. Any restrictions on use of the property must be set forth in the agreement to be enforceable.

- License Agreement, Construction:

A regulatory requirement for construction contractors to bear the responsibility for obtaining necessary licenses and permits and complying with any Fed-

eral, State and municipal laws, codes, and regulations applicable to the performance of work on fixed-price construction or dismantling, demolition or removal-of-improvements contracts.

- **License Agreement, Patents and Royalties:**

A legal document setting forth the rights and responsibilities of each party with regard to a patented product as well as the governing provisions on the payment of royalties to the owner of the patent.

- **License Agreement, Rights in Technical Data and Computer Software:**

A license incorporated into a government contract setting forth the duties and responsibilities of the parties with regard to rights in technical data and/or computer software.

Synonyms: Franchise, License, Exclusive License, Non-exclusive License.

Antonyms: None.

## **21. Long Term Contracting**

A search of the FAR-on-Line database elicited no references to the term LONG TERM CONTRACTING, however, three references were found to "long-term contract(s)," three to "long-term relationships," one to "long-term research or development need" and one to "long-term or continuing nature." There were no references to any of these in the literature review.

According to FAR 8.304, "Acquiring Utility Services,"

(a) GSA has statutory authority to enter into long-term contracts for utility services for periods not to exceed a term of 10 years (40 U.S.C. 481). These contracts may be in the form of an areawide contract or a separate contract. GSA may delegate this authority to other agencies that have qualified staffs.

(b) A LONG-TERM CONTRACT may be justified and is usually required by any of the following circumstances:

(1) The Government will obtain lower rates, larger discounts, or more favorable conditions of service.

(2) A proposed connection charge, termination liability, or any other facilities charge to be paid by the Government will be reduced or eliminated.

(3) The utility service supplier refuses to render the desired service except under a long-term contract.

(c) Other conditions for acquisitions under LONG-TERM CONTRACTS shall be determined by the specific delegation of authority to the agency from GSA. (28; 29)

In discussing the negotiation of contract type, FAR 16.103(c) notes, "In the course of an acquisition program, a series of contracts or a single LONG-TERM CONTRACT, changing circumstances may make a different contract type appropriate in later periods than that used at the outset" (28; 29).

With regard to coverage of contract modifications to LONG-TERM CONTRACTS by Cost Accounting Standards, at approximately lines 17881 and 20477 of FAR Appendix B, "Cost Accounting Preambles and Regulations," observes, "One commentator pointed out that in a LONG-TERM CONTRACT, most changes represent 'instead of' type changes with cost of price adjustments only for the incremental effect of the change." Since there is no practical way to separately identify such incremental costs, the Cost Accounting Standards Board decided to exempt these types of negotiated modifications at their inception. However, the requirement for coverage by the Board's rules, regulations, and Cost Accounting Standards will remain intact for "annual extension[s] of existing negotiated contracts and similar contract modifications" (28; 29).

ASC/PK Policy Letter 92-030, ATCH 2, ¶ 2, "Adding Production Lots to Existing Contracts," speaks to the risk associated with long-term contracts. Other than for contracts for utility services, this is the only specific reference found to contracts of over 10 years' duration. It says in ¶ 2,

LONG-TERM CONTRACTS (i.e., approaching or over 10 years) generally impose significant pricing risks on either the contractor or the government or both. The longer the contract and more production lots that are incorporated, the more difficult the contract is to manage. Corporate memory is easily lost, terms and conditions become very difficult to track and apply, and progress payments become cumbersome. (The latter will tend to intensify with more frequent changes in the progress payment rate.) Contracts containing a mix of R&D and production have additional complexities due to incentive structures and segregation of cost requirements. Finally, the expiration of the "M" account will necessitate greater emphasis on timely settlement of fiscal year appropriations and close-out of contracts. Taken together, all of these factors tend to steer us away from awarding annual production lot buys on existing contracts. (11; 28)

DFARS 215.971-3 also addresses the risk inherent in LONG-TERM CONTRACTS, without provisions protecting the contractor, particularly when there is considerable economic uncertainty. It permits the contracting officer to assign a higher than normal value when evaluating profit potential on a program (20; 28).

In another context, FAR 35.001 and 35.017 define and discuss "Federally Funded Research and Development Centers (FFRDC's)," which provide activities under a *long-term relationship* that are sponsored under a broad charter by a Government agency (or agencies) for the purposes of performing, analyzing, integrating, supporting, and/or managing basic or applied research and/or development. The FAR indicates that the *sponsoring agreement* "may take various forms: it may be included in a contract between the Government and the FFRDC, or in another legal instrument under which an FFRDC accomplishes effort, or it may be a separate written agreement" (28; 29). This infers that there are long-term contracting aspects to the written agreements, signifying sponsorship of an FFRDC, which are used to establish the mission of the FFRDC and to ensure periodic reevaluation thereof. No time limitations were specified as to the duration of such an arrangement.

Since neither the term "long-lead" nor "multiyear" contract(s) is mentioned in connection with the term "long-term contract(s) (or contracting)" they are assumed not to be synonymous and thus will not be listed below the definition.

Therefore, based on the limited amount of information available, the proposed synthesized definition for the term LONG-TERM CONTRACTING is:

A method of contracting for required services and supplies over a period of 10 or more years. It is used:

- to sponsor Federally Funded Research & Development Centers (FFRDCs) when an FFRDC meets some special long-term research or development need, integral to the mission and operation of the sponsoring agency, which cannot be met as effectively by existing in-house or contractor resources;
- by GSA in the acquisition of utility services for periods not to exceed 10 years;

- as a way of adding production lots to existing contracts. This method is generally non-preferred because of the likelihood of significant pricing risks to both parties and increased management uncertainty over an extended period, as well as additional complexities introduced where contracts contain a mix of research and development (R&D) and production; and/or
- for management and operating contracts where the work is closely related to the agency's mission and is of long-term or continuing nature, and there is a need (1) to ensure its continuity and (2) for special protection covering the orderly transition of personnel and work in the event of a change in contractors.

Synonyms: Utility Services Contracting, Facilities Contracting, FFRDC Contracting.

Antonyms: None.

## **22. Material Requirements Planning (MRP)**

The term MATERIAL REQUIREMENTS PLANNING is normally used during the manufacturing planning process. Jay Heizer, et al., succinctly maintain that MATERIAL REQUIREMENTS PLANNING is simply "An inventory model that can handle dependent demand." (34:211). It is described in more detail in Arthur C. Laufer's text, *Production and Operations Management*, as "a method for planning and controlling inventories in which projected inventory levels are computed from present inventories and from planned transactions affecting inventory levels." Such transactions cover withdrawals and additions to inventories based on projected requirements for the finished product. Laufer indicates that once final product requirements are broken down or exploded into the requirements for all lower order components, they can then be translated into purchase orders and shop orders (40:547). The *Desktop Guide* agrees that MRP is a "technique used to determine the quantity and timing requirements of "dependent demand" materials used in the manufacturing operation (those materials whose use is directly dependent on the scheduled production of a larger component or finished product)" (51:39).

Laufer suggests that, "The underlying concept of MRP is such that there is no need for safety stock (or buffer inventories) at the component level when the demand is dependent" (40:559). Manufacturing Resources Planning (MRP II) and Kanban or Just-in-Time inventory

control techniques subscribe to the theory of absolute minimization of inventory levels as well, but the literature indicates that it is more theoretical than reality-based in practice. Manufacturers strive for zero inventories, but they are pragmatic enough to keep certain levels of material and resources available to avoid unexpected delays or shutdowns.

The *Reference Book* asserts briefly that a MATERIAL REQUIREMENTS PLANNING (MRP) System is "any form of computerized manufacturing management and scheduling system" (48:257). *The Desktop Guide* confirms, "In practice, the actual number-crunching and paperwork generation usually is accomplished by computer, which takes the master production schedule output for a given product and precisely calculates the specifics" (51:39). Thomas M. McCann defines the specifics as:

- What parts are needed and whether they should be made or bought;
- How many parts are needed; and
- When the parts must be available to meet the schedule. (44:6-23)

According to the *Reference Book*, the Defense Contract Audit Agency (DCAA) *Contract Audit Manual (CAM) 6-308* describes an MRP system as "one that identifies, initiates procurement of, and maintains current and future materials necessary to support production operations." The *Reference Book* continues:

DCAA identifies the following features as common to the various MRP design configurations:

- (1) highly automated systems with extensive use of data processing;
- (2) a master production schedule that maintains a balance between requirements and replenishments;
- (3) a netting process that involves a netting formula derived from requirements and replenishments; and
- (4) dynamic scheduling of items in the production process. (48:257)

It is noted that MRP is a method of inventory control, not inventory costing, but concerns that deficiencies in MRP systems, or in their use, might cause overcharging led DoD to issue

compliance guidelines and DCAA to publish extensive guidance on MRPs. A number of statutes and publications are cited as authorities (48:257).

Based on the literature review, the proposed synthesized definition of the term **MATERIAL REQUIREMENTS PLANNING** is:

A computerized priority planning and controlling technique based on the quantity and timing requirements of materials whose use is directly dependent on the scheduled production of a larger component or finished product. It is a time-phased explosion of the master production schedule, intended to minimize safety stock or buffer inventories by utilizing bills-of-material and inventory status dates to calculate:

- What parts are needed and whether they should be made or bought;
- How many parts are needed; and
- When the parts must be available to meet the schedule.

Synonyms: Manufacturing Resource Planning (MRP II), Inventory Planning.

Antonyms: None.

### **23. Materiel Management**

The *Compendium* cites DoD 4140.36 (and immediately follows with DoD 4140.32-M which is almost identical (see bracketed items for differences)) to provide the most detailed definition of the term **MATERIEL MANAGEMENT** found during the literature review:

Direction and control of those aspects of logistics which deal with materiel, including the functions of identification, cataloging, [inventory] standardization, requirements determination, procurement, inspection, quality control, packaging, storage, distribution, disposal, maintenance, [arrangement for transportation maintenance], mobilization planning, industrial readiness planning, and item management classification; encompasses [Synonymous with] materiel control, inventory control, inventory management and supply management. (15:435)

The *Compendium* also quotes AFLCR 400-1, which holds that **MATERIEL MANAGEMENT** is "a generic term signifying and encompassing the responsibilities of management relating to systems, materiel management aggregations, items and Federal Supply Classes. . ." (15:435). The *Desktop Guide* offers the following definition extracted from *Purchasing and Materials Management*:

An integrated systems approach to the coordination of materials activities and the control of total materials costs. It advocates assigning to a single operating department all major activities that contribute to the cost of materials. In the classic materials management organization, the following activities report to the materials management organization, the following activities report to the materials manager: purchasing; inbound traffic; production scheduling; inventory control; and stores and receiving. (51:39)

The *Compendium* distinguishes between the function of MATERIEL MANAGEMENT and the functional organizations which actually perform those functions. It cites AFLCR 400-21, "A policy coordinating group established by the Joint Logistics Commanders to serve as a communication link among the military logistics commands to further progress toward the objective of integrated management" (15:435). FAR 208.7001 defines "Integrated Materiel Management" as

assignment of acquisition management responsibility to one department, agency, or the General Service Administration for all of DoD's requirements for the assigned item. Acquisition management normally includes computing requirements, funding, budgeting, storing, issuing, cataloging, standardizing, and contracting functions. (28; 29)

Synthesis of these definitions results in the following proposed definition for the term MATERIEL MANAGEMENT:

An integrated systems approach to the coordination of materials activities and the control of total materials costs which results in the assignment of the responsibility for all major activities that contribute to the cost of materials to a single operating department or coordinating group. These responsibilities normally include computing requirements, funding, budgeting, storing, issuing, cataloging, standardizing, and contracting functions as well as serving as a communications link among the military logistics functions.

Synonyms: Integrated Materiel Management, Inventory Control, Materiel Control, Materials Management, Supply Management.

Antonym: None.

## 24. Non-Developmental Item (NDI)

The *Reference Book* makes the definition of NON-DEVELOPMENTAL ITEM found in DoDI 5000.2, Part 15, ¶ 82 and AFR 57-1 ¶ 82 more generally applicable by deleting references to the specific paragraphs in the above Instruction and Regulation. It also notes that 10 U.S.C. 2325

"states a strong congressional preference for the use of such items by DoD". This definition follows:

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace. . . (48:274-275; 19:15-12; 11:127)

DoDI 5000.2, Part 10, § C.2.d. mandates that, "NON-DEVELOPMENTAL ITEMS shall be used to meet acquisition requirements wherever possible" (19:10-C-2). The *Desktop Guide* explains that "use of a NON-DEVELOPMENTAL ITEM reduces research and development costs and speeds up the acquisition".

The reading material provided for SMGT 643, System Acquisition Management (Summer Quarter), includes a copy of *The Air Force Mission Needs and Operational Requirements Process*, edited by Professor Richard Andrews. The last paragraph summarizes the coverage of NONDEVELOPMENTAL ITEMS by AFR 57-1. He says,

NDIs are systems/subsystems available from a variety of sources that require little or no development effort to meet Air Force requirements. They include commercial "off the shelf" (COTS) items, prototyping of such items, and items in development or in use by other services, government agencies, and/or allies. (1:76)

Professor Andrews explains, "The use of NDI is encouraged because their acquisition enhances the economy of DoD resources by minimizing research and development efforts that can take additional time and money. . ." He continues by pointing out the benefits derived from "economies of scale, proven, mature capabilities, and greater use of standardized, common systems and equipment" (1:76).

ASC/PK Policy Letter 92-045, USDA Letter ¶ 3, cautions, "NON-DEVELOPMENTAL means 'not requiring development.' It does not mean 'not requiring government-funded development'. . ."

It addresses a perceived problem with the encouragement of contractors to make "substantial investments in development, testing, tooling or facilitization as part of the proposal process to 'prove' the feasibility of an NDI acquisition" and suggests that "a practice of encouraging significant contractor investment to avoid direct funding of necessary development would be just as unreasonable as the unfair apportionment of financial risk in fixed price development contracts or fixed- or ceiling-priced production options". Acquisition personnel are directed to "make every effort to identify NON-DEVELOPMENTAL solutions, to our requirements in preference to new development" in keeping with current law and regulations (12; 26).

None of the literature reviewed took issue with the first definition listed above and it is presented here as the proposed definition:

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace.

Synonyms: Commercial Item, Commercial Off-the-Shelf (COTS), Off-the-Shelf.

Antonym: Developmental Item, Non-Commercial Item.

## **25. Pilot Production**

All sources reviewed agree with the general concept that term PILOT PRODUCTION is a period before full rate production begins, during which limited, initial quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production. Although the terminology is slightly different, e.g., a "limited production run for a new system" (AFR 80-13; 15:522); a "low rate of output at the end of Full Scale Development or the beginning of production" (51:38); the "initial production of a system in limited quantity" (20:71);

or, the "controlled manufacture of limited numbers of an item for service T&E [test and evaluation] purposes" (44:B-11), these terms appear to mean essentially the same thing.

DoDI 5000.2, Part 6, Section 0, 2.d., supports the above concept. It states, "Full rate production of a system will not be approved until the product design has been stabilized, the manufacturing processes have been proven, and rate production facilities, equipment, capability and capacity are in place (or being put in place) to support the approved schedule (19:6-0-2). The *Desktop Guide*, expands on this by providing the following rationale for LRIP. It says it "reduces the government's (buyer's) exposure to large retrofit problems and costs while still providing adequate numbers of hard tooled production items for final development and operational tests prior to a full production decision" (51:38).

FAR 9.301 indicates that "'First Article' . . .means preproduction models, initial production samples, test samples, first lots, pilot lots and pilot models" (28; 29). This definition places it in the realm of synonymous terms. It is noted however, the literature review indicates there is disagreement among the authorities studied about other terms synonymous to PILOT PRODUCTION. The *Desktop Guide* says that PILOT PRODUCTION is also known as "Low Rate Initial Production [LRIP]" and submits that LRIP is "a risk reduction method that is also known as "Limited Production" and PILOT PRODUCTION (51:44,38), however the *Glossary* specifically states, "Not the same as LRIP" (22:95). Since this is the only citation which takes issue with using these terms interchangeably, LRIP will be listed among the synonyms to see if a consensus can be reached among acquisition professionals. If sufficient numbers question its use, in accordance with the methodology referenced in Chapter III, it will be dropped prior to publication of the consensus definition.

A related, but ostensibly not entirely synonymous, term found in DFARS 246.770-1(d) is "Initial production quantity." It "means the number of units of a weapon system contracted for in the first program year of full-scale production." Sub¶ (e), in defining "mature full-scale production" states that it means "follow-on production of a weapon system after manufacture of the lesser

of the initial production quantity or one-tenth of the eventual total production quantity." Although they sound similar, it appears to the researcher that there is a difference between "A limited production run of a new system which has completed engineering development and for which the capability to mass produce the item for inventory needs to be demonstrated" and "the number of units of weapon system contracted for in the first program year of full-scale production" (20; 29), therefore, the term "initial production quantity" will not be tendered as a synonym for PILOT PRODUCTION.

Based on the information found during the literature review, the following synthesized definition for the term PILOT PRODUCTION is proposed:

A period before full rate production begins, during which limited, initial quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production.

Synonyms: First Article(s), Limited Production, Low Rate Initial Production.

Antonyms: Full Rate Production.

## F. Literature Review and Synthesized Definitions for SURVEY B.

### I. Acquisition Streamlining

The *FAR* and the *Glossary* define ACQUISITION STREAMLINING as:

Any effort that results in more efficient and effective use of resources to design and develop, or produce quality systems. This includes ensuring that only necessary and cost-effective requirements are included, at the most appropriate time in the acquisition cycle, in solicitations and resulting contracts for the design, development, and production of new systems, or for modifications to existing systems that involve redesign of systems or subsystems. (28; 29; 22:3)

The definition for ACQUISITION STREAMLINING in the *Desktop Guide* varies slightly as shown below:

Any action that results in more efficient and effective use of resources to develop, produce, and deploy quality systems and products. This includes ensuring that only cost effective requirements are included, at the most appropriate time, in system and equipment solicitations and contracts. (51:2)

The *Reference Book* definition, which is illustrated below, adds the concept of tailoring appropriate specifications, standards, and documents.

Effort of a procuring agency that results in more efficient and more effective use of resources to design, develop, produce or deploy quality systems. The objective of acquisition streamlining is to reduce the time and cost required for acquiring systems and to improve the quality of those systems by ensuring that solicitations and contracts contain only those necessary specifications, standards and related documents that have been tailored (see TAILORING) for application at the most appropriate time in the acquisition cycle. (48:7-8)

Finally, McCann's definition of ACQUISITION STREAMLINING expands on those shown above by including the opinion that industry and the government should work together in order to streamline the process. This is true, however, this does not define what acquisition streamlining is. Thus, this point will be omitted in the synthesized definition. McCann says that ACQUISITION STREAMLINING is,

A major initiative directed at the development of realistic and cost effective contract requirements. The program objectives are to reduce the time and cost of weapon system acquisition, and to improve quality. It ensures that only the necessary requirements are imposed during each acquisition phase through tailoring of military standards. This approach gives program managers greater latitude to defer imposition of military specifications and other detailed "how to" contract requirements until industry has had the opportunity to recommend the most technically appropriate and cost effective approaches. The military departments and industry are working together to identify outdated and unnecessary military and specifications and standards and come up with better procurement documents that are compatible with new technology. (44:5-26)

The proposed synthesized definition incorporates the important points of each of the above definitions:

Any effort that results in more efficient and effective use of resources to design, develop, produce, and deploy quality systems and products. This includes ensuring that only necessary and cost effective requirements are included, at the most appropriate time, in solicitations, standards, and contracts for the design, development, production, and deployment of new systems, or for modifications to existing systems that involve redesign of systems or subsystems. The objective of acquisition streamlining is to reduce the time and cost required for an acquisition and to improve the quality of those systems by tailoring requirements to meet acquisition needs.

Synonyms: Procurement Streamlining, Streamlining.

Antonyms: None.

## 2. Allocated Baseline

The *Compendium* defines the term ALLOCATED BASELINE as "The initial approved allocated configuration identification" (15:47). The *Glossary* defines an allocated baseline as a "Development specification (Type B Spec) which defines performance requirements for each configuration item of the system" (22:10). However, these definitions do not give the reader full insight into the meaning of an ALLOCATED BASELINE. The synthesized definition explains the meaning of the term "Allocated Configuration Item" (ACI) and provides a more detailed description of an ALLOCATED BASELINE.

The *Compendium* and McCann have complementary definitions of the term. Allocated Configuration Item (ACI). The *Compendium* definition follows:

current, approved performance oriented specifications governing the development of configuration items that are part of a higher level CI in which each specification (1) defines the functional characteristics that are allocated from those of the higher lever CI, (2) establishes the tests required to demonstrate achievement of its allocated functional characteristics, (3) delineates necessary interface requirements with other associated configuration items, and (4) establishes design constraints, if any, such as component standardization, use of inventory items and integrated logistic support requirements. (15:47)

McCann states that an ACI:

normally consists of a series of type B specifications defining the functional requirements for each major configuration item. These may be supplemented by other types of specifications, engineering drawings and related data, as necessary to specify: (1) all essential configuration item functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic. (44:B-1)

McCann also states that an ALLOCATED BASELINE is one of three baselines considered in configuration management. He says.

Three baselines are generally considered in configuration management. These are functional, allocated, and product baselines. The functional baseline is the initial baseline and is defined by the system specification prepared during the concept exploration phase. As the system specification is expanded and refined, contractor specifications are prepared for all new configurations. These development specifications define the allocated baseline for the system CIs. As the program proceeds through full-scale development, system as well as CI design and development continues and results in item product specifications. The product specification then becomes the product baseline for use in production. (44:13-7)

The synthesized definition of the term ALLOCATED BASELINE captures the important elements from each of the above definitions.

The second of three baselines generally considered in configuration management. The other two are functional and product baselines. The allocated baseline begins as the system specification is expanded and refined. Contractor specifications are prepared for all new configurations. These development specifications define the allocated baseline for a system's Allocated Configuration Items (ACI).

An ACI, which is the allocated baseline plus approved changes, normally consists of a series of type B specifications defining the functional requirements for each major Configuration Item (CI). These may be supplemented by other type of specifications, engineering drawings and related data, as necessary to specify: (1) all essential CI functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic.

Synonyms: None.

Antonyms: None.

### **3. Baseline Cost Estimate (BCE)**

McCann defines a BASELINE COST ESTIMATE (BCE) as: "A document which provides a detailed estimate of acquisition and ownership costs" (44:B-2). The *Glossary* definition provides a more informative description of a BCE.

A detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is performed early in the program and serves as the basepoint for all subsequent tracking and auditing purposes. (22:12)

The *Dictionary of Cost Estimating Terms & Phrases* defines BCE as:

Cost of the baseline program. Is the first deliberate, detailed estimate of acquisition and ownership costs. This estimate is normally performed in support of costing required for high level decisions and serves as the base point for all subsequent tracking, auditing, and traceability. (52;20)

All three definitions of this term are consistent with each other. The proposed synthesized definition for BASELINE COST ESTIMATE is:

The first detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is performed early in the program and serves as the base point for all subsequent tracking and auditing purposes.

Synonyms: None.

Antonyms: None.

#### 4. Contractor Inventory

FAR subpart 45.601 and the *Reference Book* define CONTRACTOR INVENTORY as:

- (a) Any property acquired by and in the possession of a contractor or subcontractor under a contract for which title is vested in the Government and which exceeds the amounts needed to complete full performance under the entire contract;
- (b) Any property that the Government is obligated or has the option to take over under any type of contract as a result either of any changes in the specifications or plans thereunder or of the termination of the contract (or subcontract thereunder), before completion of the work, for the convenience or at the option of the Government; and
- (c) Government-furnished property that exceeds the amounts needed to complete full performance under the entire contract. (28; 29; 48;232)

The *Compendium* defines CONTRACTOR INVENTORY similarly. However, it combines FAR's sections (a) and (c) into one section. Thus, the synthesized definition will use the *Compendium's* definition which adequately and sufficiently describes contractor inventory. The proposed synthesized definition is:

1. Any property that the Government is obligated to, or has the option to, take over, under any type of contract, as a result, either of any changes in the specifications or plans thereunder or, of the termination of the contract (or subcontract thereunder), prior to completion of the work, for the convenience or at the option of the Government.

2. Any property acquired by and in the possession of a contractor or subcontractor (including Government-furnished property) under a contract, pursuant to the terms of which, title is vested in the Government, and in excess of the amounts needed to complete full performance under the entire contract.

Synonyms: None.

Antonyms: None.

## 5. Experience Curve

The literature review and our experience indicate that the terms EXPERIENCE CURVE and learning curve have the same meaning. The following synthesized consensus definition of "learning curve" was developed in the Master's thesis, *A Dictionary of Acquisition and Contracting Terms*, by Mark Brown of the Naval Postgraduate School.

A quantitative method for projecting resource requirements, typically expressed as labor hours or material quantities, based on the observation that as an effort is repetitively performed there is a constant percentage decrease in the resources required. (7:97)

Synonyms: Improvement Curve, Experience Curve, Leamer's Curve.

Antonyms: None.

As a result, this survey does not include a separate definition of the term EXPERIENCE CURVE since "learning curve" and EXPERIENCE CURVE both have the same meaning, and a synthesized consensus definition already exist for "learning curve". The final dictionary, when defining EXPERIENCE CURVE should reference "learning curve" or use the synthesized consensus definition of learning curve.

## 6. Functional Baseline

The *Compendium* defines the term FUNCTIONAL BASELINE as "The initial approved functional configuration identification" (15:310).

The *Glossary* defines FUNCTIONAL BASELINE as "Program requirements (Type A Spec) technical portion; provides basis for contracting and controlling system design" (22:53).

However, these definitions do not give the reader full insight into a FUNCTIONAL BASELINE. The synthesized definition will explain what a "Functional Configuration Item" (FCI) is and provide a more detailed description of a FUNCTIONAL BASELINE.

The *Compendium* and McCann have complementary definitions for FCI. The *Compendium* defines FCIs as:

The current approved or conditionally approved technical description for a configuration item as set forth in specifications, drawings and associated lists, and documents referenced therein, which prescribes (1) all necessary functional characteristics, 2) the tests required to demonstrate the achievement of specified functional characteristics, 3) the necessary interface characteristics with associated [configuration items] CIs, 4) CI's key functional characteristics and its key lower level CIs, if any, and 5) design component standardization, use of inventory items, and integrated logistic support policies. (15:310-311)

McCann states that an FCI:

normally includes a Type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic. (44:13-7)

McCann continues, "Three baselines are generally considered in configuration management. These are functional, allocated, and product baselines. The FUNCTIONAL BASELINE is the initial baseline and is defined by the system specification prepared during the concept exploration phase" (44:13-7).

The proposed synthesized definition of FUNCTIONAL BASELINE will capture the important elements from each of the above definitions.

The first of three baselines generally considered in configuration management. The other two are allocated and product baselines. Baselines provide the basis for contracting and controlling system design. The functional baseline is defined by the system specification prepared during the concept exploration phase which defines the functional baseline for the system Functional Configuration Items (FCI).

The FCI, which is the functional baseline plus approved changes, will normally include a Type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic.

Synonyms: None.

Antonyms: None.

## **7. Government Purpose License Rights (GPLR)**

DFARS 227.401 explains GOVERNMENT PURPOSE LICENSE RIGHTS (GPLR) include the "right to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for government purposes only" (20; 29). DFARS 227.402-72(2)(i) adds that GOVERNMENT PURPOSE LICENSE RIGHTS exist for a stated period of time. The government will be entitled to unlimited rights after GOVERNMENT PURPOSE LICENSE RIGHTS expire (20; 29). The *Glossary* (22:56) and the *Reference Book* (48:206-207) agree with the DFARS interpretation of GOVERNMENT PURPOSE LICENSE RIGHTS.

Accordingly, the proposed synthesized definition of GOVERNMENT PURPOSE LICENSE RIGHTS is:

Contractually specified rights to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Such rights are valid for a stated period of time. The Government is entitled to unlimited rights after the such time period expires.

Synonyms: None.

Antonyms: None.

## **8. Initial Provisioning**

See PROVISIONING, below.

## **9. Office of Federal Procurement Policy (OFPP)**

The *Reference Book* defines OFFICE OF FEDERAL PROCUREMENT POLICY (OFPP) as:

A government organization, located in the Executive Office of the President (in the Office of Management and Budget (OMB)), that is responsible for providing overall executive branch guidance and direction of Government procurement policy and prescribes policies and regulations to be followed by executive agencies in acquiring goods, services, and facilities. The OFPP leadership role in the procurement process entails, among other things, chairing the Federal Acquisition Regulatory (*FAR*) Council, which prescribes Government-wide regulations (the Federal Acquisition Regulations (*FAR*) System), providing for GSA's Federal Procurement Data System (FPDS), providing for a Federal Acquisition Institute (FAI) at GSA, consulting with agencies (including the Small Business Administration (SBA)), developing innovative procurement methods and procedures to be tested by selected executive agencies, issuing policy regarding conflict-of-interest standards for individuals providing consultant services, establishing and maintaining the Cost Accounting Standards (CAS) Board, and serving as advocate for the acquisition of Commercial Products. (48:279-280)

The *Desktop Guide* provides a more general description of OFPP as: "An organization within the Office of Management and Budget (OMB) that provides leadership and direction to federal procurement programs" (51:42).

*Keyes* explains:

On August 30, 1974, the President signed into law the Office of Federal Procurement Act. ... Section 6(d) of the Act, Authority and functions," that the Administrator's functions shall include: '(1) establishing a system of coordinated and to the extent feasible, uniform procurement regulations for the executive agencies; (2) establishing criteria and procedures for an effective and timely method of soliciting the viewpoints of interested parties in the development of procurement policies, regulations, procedures, and forms; and (3) establishing a system for collecting, developing, and disseminating procurement data which takes into account the needs of the Congress, executive branch, and the 'private sector' . . . The OFPP has authority for all of Government regulations governing procurement of federal agencies. (37:2)

The *Keyes'* definition limits the OFPP's responsibilities to those that were originally established for OFPP in 1974. It fails to include more current OFPP responsibilities. For example, the administrator of OFPP serves as chairperson of the Cost Accounting Standard (CAS) board.

The synthesized definition, shown below, will be based on the *Reference Book's* definition with modifications where appropriate.

An organization, created in 1974, within the Office of Management and Budget (OMB), responsible for providing overall executive branch guidance, leadership, and direction of Government procurement policy and regulations to be followed by executive agencies in acquiring goods, services, and facilities.

The OFPP leadership role in the procurement process entails, among other things, chairing the Federal Acquisition Regulatory (*FAR*) Council, providing for GSA's Federal Procurement Data System (FPDS), providing for a Federal Acquisition Institute (FAI) at GSA, consulting with agencies (including the Small Business Administration (SBA)), developing innovative procurement methods and procedures to be tested by selected executive agencies, issuing policy letters including conflict-of-interest standards for individuals providing consultant services, establishing and maintaining the Cost Accounting Standards (CAS) Board, and serving as advocate for the acquisition of Commercial Products.

Synonyms: None.

Antonyms: None.

## 10. Plant Equipment

### a) *Other Plant Equipment (OPE)*

McCann, the *Glossary*, and the *Compendium* base their definitions (shown below) of OTHER PLANT EQUIPMENT (OPE) on DFARS 245.301.

That part of plant equipment regardless of dollar value, which is used in or in conjunction with the manufacture of components or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as IPE (Industrial Plant Equipment). (44:811; 22:92; 15:503; 20; 28)

The above definition of OPE is also supported in the *Reference Book*'s definition of PLANT EQUIPMENT (48:298-299). Therefore, all five sources agree upon the definition of OPE. The proposed synthesized definition of OPE, shown below, references IPE, which is also defined below, to enable the reader to fully comprehend what items are and are not classified as OPE.

#### **Other Plant Equipment (OPE)**

That part of plant equipment regardless of dollar value, which is used in, or in conjunction with, the manufacture of components or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as Industrial Plant Equipment (IPE).

Synonyms: None.

Antonyms: None.

**b) Industrial Plant Equipment (IPE)**

However, the above definition is not considered complete. The concept of "Industrial Plant Equipment" (IPE) should also be defined since IPE is mentioned in the OPE definition. DFARS 245.301 defines IPE as:

plant equipment in Federal stock group 34 with an acquisition cost of \$15,000 or more used for cutting, abrading, grinding, shaping forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or R&D operations. (20; 28)

Based on the above, the proposed synthesized definition of IPE is:

**Industrial Plant Equipment (IPE)**

Plant equipment in Federal Stock Group 34, with an acquisition cost exceeding a specified level, used for cutting, abrading, grinding, shaping forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or Research & Development operations.

Synonyms: None.

Antonyms: None.

**11. Plant Clearance Officer**

FAR 45.601 defines a PLANT CLEARANCE OFFICER as: "an authorized representative of the contracting officer assigned responsibility for plant clearance" (28; 29). The definition fails to adequately address plant clearance. The FAR defines "Plant Clearance" as:

all actions relating to the screening, redistribution, and disposal of contractor inventory from a contractor's plant or work site. The term "contractor's plant" includes contractor-operated Government facilities. (28; 29)

Keyes (37:19) uses the above definition to define plant clearance. The *Compendium's* definition of a PLANT CLEARANCE OFFICER is consistent with FAR's definition but adds the following two points. First, the PLANT CLEARANCE OFFICER is responsible "for executing sales

contracts and contracts incident to the removal of Government property from contractor's plants." Second, the PLANT CLEARANCE OFFICER is responsible for clearing "excess and surplus contractor inventory" (15:525).

Taking the above into consideration, the proposed synthesized definition of PLANT CLEARANCE OFFICER is:

The plant clearance officer is responsible for all actions relating to the screening, redistribution, and disposal of contractor inventory from a contractor's plant or work site. This includes executing sales contracts and contracts incident to the removal of Government property and excess and surplus contractor inventory from contractor's plants. The term "contractor's plant" includes Government owned contractor-operated (GOCO) facilities. The contracting officer assigns these responsibilities to the plant clearance officer.

Synonyms: None.

Antonyms: None.

## **12. Procurement Planning (See Acquisition Planning)**

The literature review indicates that the terms "procurement" and "acquisition" are synonymous. The *Reference Book* defines "procurement" as:

All stages of the process of acquiring supplies or services, beginning with determination of a need for the supplies or services and ending with contract completion and closeout. 'Procurement' also means the acquisition (and directly related matters), from non-Federal Sources, of personal property and nonpersonal services (including construction.) by such means as purchasing, renting, leasing (including the leasing of real property), contracting, or bartering, but not by seizure, condemnation, donation, or requisition. The synonymous term Acquisition is usually used in the Federal Acquisition Regulations (FAR) System, whereas 'procurement' is used in the United States Code. Contracting is a subset of procurement. (48:307-308)

FAR 2.101 defines "acquisition" as "Acquiring by contract, with appropriated funds, supplies or services (including construction) by and for the use of federal government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated" (28; 29).

FAR 2.101 and the *Reference Book* both state that,

Acquisition begins at the point when agency needs are established and includes description of the agency's requirements, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by the contract. (28; 29; 48:5)

The *Reference Book* adds that: "The procurement statutes generally use the synonymous term 'procurement.' However, 'acquisition' is generally used in the *FAR* to describe this activity" (48:5).

The *Glossary* (22:1,100), the *Desktop Guide* (51:2,46), and the *Compendium* (15:11,542), all have comparable definitions for "acquisition" and "procurement." Therefore, there appears to be agreement among the sources that PROCUREMENT PLANNING and ACQUISITION PLANNING have identical meanings. The published literature (including the *FAR*) and our combined experience indicates that the term ACQUISITION PLANNING is used more frequently than the term PROCUREMENT PLANNING. Therefore, it is considered more appropriate to provide the definition under the heading ACQUISITION PLANNING than under PROCUREMENT PLANNING. See the ACQUISITION PLANNING section, below, for more details of the literature review and for the synthesized definition of the term ACQUISITION PLANNING.

**a) Acquisition Planning (AP)**

FAR 7.102 provides the following definition of ACQUISITION PLANNING:

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. Acquisition planning includes developing the overall strategy for managing the acquisition. (28; 29)

The *Desktop Guide* and *Keyes* both use the above FAR definition as their definition of ACQUISITION PLANNING. The *Reference Book* also uses this definition, but adds that the purpose of advanced ACQUISITION PLANNING "is to ensure that Full and Open Competition is obtained to the greatest extent feasible" (48:6).

*Government Contracting Based on the Federal Acquisition Regulation* concurs with the above concepts and further states:

Government acquisition activities must consider mission needs, strategic planning, planning alternatives, budgetary programming, and needs description. ... It (acquisition plan) includes such fundamental considerations as funding, choice of procurement method, source competence, competition, source selection, delivery, government-furnished property, possible follow-on requirements, and contract administration. ... Acquisition planning should begin as soon as the need is identified. (63:93-94)

Taking the above into consideration, the synthesized definition of ACQUISITION PLANNING is:

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. Acquisition Planning includes developing the overall strategy for managing the acquisition. The strategy considers such factors as: mission needs, funding, alternatives, choice of procurement method, source competence, competition, source selection, delivery, government-furnished property, possible follow-on requirements, and contract administration. Acquisition Planning should begin as soon as a requirement is identified.

Synonyms: Procurement Planning, Advance Acquisition Planning.

Antonyms: None.

### **13. Product Assurance**

The *Dictionary of Cost Estimating Terms and Phrases* defines PRODUCT ASSURANCE as:

A management discipline which assures that all critical activities are identified; that resources in the form of documented technology, facilities and qualified people are developed for each activity; and that these resources are applied to each project to achieve customer requirements. (52:113)

The *Glossary* does not provide a definition for PRODUCT ASSURANCE, but it does define a "Product Assurance Plan." Generally, such a plan should contain all the activities that are within the plan's scope. Therefore, including a definition of "Product Assurance Plan" should provide further insight into the definition of PRODUCT ASSURANCE. The *Glossary* states that a "Product As-

surance Plan" includes reliability, availability and maintenance, quality hardware and software assessments to ensure user satisfaction, mission and operational effectiveness and performance to specified requirements (22:101).

The definitions are consistent when explaining the goal of PRODUCT ASSURANCE is to meet specified or customer requirements. Both definitions were taken into consideration when developing the proposed synthesized definition.

A discipline which assures that all critical activities are identified; that resources are developed for each activity; and that these resources are applied to each project to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

Synonyms: None.

Antonyms: None.

#### **14. Product Baseline**

The *Compendium* defines "production baseline" as, "The baseline established prior to the commencement of production to which configuration end item manufacture and facility construction is controlled. This baseline is the basis for control during the production and operational periods" (15:548).

The *Glossary* indicates that a PRODUCT BASELINE is, "Established by the detail design documentation for each configuration item. Normally includes process baseline (Type D Spec), material baseline (Type E Spec), Type C Spec, and drawings" (22:101).

McCann states that a PRODUCT BASELINE is the last of three baselines considered in configuration management. He provides the following information:

Three baselines are generally considered in configuration management. These are functional, allocated, and product baselines. The functional baseline is the initial baseline and is defined by the system specification prepared during the concept exploration phase. As the system specification is expended and refined, contractor specifications are prepared for all new configuration. These development specifications define the allocated baseline for the system CIs. As the program proceeds through full-scale development, system as well as CI design and development con-

tinues and results in item product specifications. The product specification then becomes the product baseline for use in production. (44:13-7)

The synthesized definition captures the important elements from each of the above definitions.

The third of the three baselines generally considered in configuration management. The other two are functional and allocated baselines. The product baseline is established prior to the commencement of production as a set of minimum system performance requirements that must be met by the system in production in order to satisfy the specified system operational requirements. This baseline is the basis for control during the production and operational periods.

Synonyms: None.

Antonyms: None.

## **15. Product Substitution**

PRODUCT SUBSTITUTION is considered a form of fraud. The *Reference Book* defines PRODUCT SUBSTITUTION as, "Delivery to the Government of a product that does not meet the contract requirements" (48:311). The DoD Inspector General (IG) definition, contained in the *Government Contract Compliance Handbook (First Edition)*, indicates that to fall under this definition, the contractor must try to deceive the government into believing that it is receiving the contractual required item or service. The DoD Inspector General adds,

'product substitution' refers generally to attempts by contractors to deliver to the Government goods or services which do not conform to contract requirements while seeking reimbursement based upon delivery of allegedly conforming products or services. (31:18-4-5)

The *Federal Contract Management: A Manual for the Contract Professional* indicates the contractor is guilty of a crime unless it can show that the Government was advised that the goods did not meet the contract's specifications (62:18-145).

The *Government Contract Compliance Handbook (Supplement)* describes four categories of PRODUCT SUBSTITUTION, paraphrased as follows:

First, PRODUCT SUBSTITUTION may take place when a contractor replaces an item expressed in the contract with an another item without receiving the government's permission to do so.

Second, the contract may specify a domestic end item, but the contractor may deliver or try to deliver an item from a foreign source. This may be also fall under the Buy American Act. Under both circumstances, the replacement item may be identical or even higher quality in all aspects with the contracted item but is still considered PRODUCT SUBSTITUTION.

Third, the contractor must perform all tests specified in the contract. Failure to perform these tests in a compliant manner is considered procurement fraud. Again, the issue is not whether the item is of acceptable quality but rather, is there an intent to deceive the government. The rationale behind this philosophy is the contractor is not in the position to determine if the replacement item has acceptable quality or how the replacement item or test will effect the government needs. Therefore, contractual imposed items and tests must be followed.

Fourth, the contractor may promise, or is contractually required, to provide skilled worker but substitutes a lower skilled worker. This type of PRODUCT SUBSTITUTION fraud frequently occur in consulting, maintenance, or Research and Development contracts (32:S-147 to -154).

The manual, *Federal Contract Management*, mentions a fifth category of PRODUCT SUBSTITUTION. It states that a contractor may also be guilty of PRODUCT SUBSTITUTION if contractually required reports contain incomplete, inadequate, or false material. Examples given were meeting minutes and technical design reports (62:18-145). The *Nash & Cibinic Report* provided additional examples such as: false test reports and procedures, false quality records, and false certificates of compliance (49:25).

These five categories of PRODUCT SUBSTITUTION are considered essential element to the proposed synthesized definition of PRODUCT SUBSTITUTION and are included as a second paragraph:

Attempts by contractors to deliver to the Government goods or services which do not conform to contract requirements while seeking reimbursement based upon delivery of allegedly conforming products or services. If the contractor delivers a nonconforming good or service, the contractor must advise the Government of the fact to prevent product substitution from occurring.

Examples of conditions under which product substitution may be alleged to occur include: 1) substitution of another item for a contractually required item; 2) replacement of a domestic required item with an item from a foreign source; 3) replacement of a contractually specified skilled worker with a lower skilled worker; 4) nonperformance of contractually required tests or situations where such tests are not performed as prescribed; and, 5) submission of contractually required reports containing incomplete, inadequate, or false material by a contractor.

Synonyms: None.

Antonyms: None.

## **16. Progress Payment Inventory**

The literature review indicates this term is not widely used. The term PROGRESS PAYMENT INVENTORY is utilized primarily by property administrators and Terminating Contracting Officers (TCOs). The *DoD Manual for the Performance of Contract Property Administration* (21:364) was the only source defining PROGRESS PAYMENT INVENTORY. Therefore, the proposed synthesized definition is based on this definition.

That property acquired by the contractor to which the Government has a vested interest solely through FAR 52.232-16, Progress Payment Clause provisions.

Synonyms: None.

Antonyms: None.

## **17. Property Administrator**

FAR 45.501 and the *Reference Book* define a PROPERTY ADMINISTRATOR as: "an authorized representative of the contracting officer assigned to administer the contract requirements and obligations relating to Government property" (28; 29; 48:317). It should be noted that the PROPERTY ADMINISTRATOR manages Government property while the plant clearance officer is responsible for the broader term, "contractor inventory."

The *Compendium's* (15:559) and the *Dictionary of Cost Estimating Terms and Phrase's* (52:117) definitions of PROPERTY ADMINISTRATOR will not be directly quoted here since they are comparable to FAR's definition and add no additional value. The synthesized definition is:

An authorized representative of the Contracting Officer (CO) assigned to administer contract requirements and obligations relating to Government property.

Synonyms: None.

Antonyms: None.

## 18. Provisioning

The literature review indicated there is an inconsistency in the definitions found for the terms "initial provisioning" and PROVISIONING. The next section discusses the findings for "initial provisioning."

### a) *Discussion of Initial Provisioning*

Both the *Glossary* and the *Compendium* define the term "initial provisioning" as:

The process of determining the range and quantity of items (i.e., spares and repair parts, special tools, test equipment, and support equipment) required to support and maintain an item for an initial period of service. Its phases include the identification of items and supply, the establishment of data for catalog, technical manual and allowance list preparation, and the preparation of instructions to assure delivery of necessary support items with related end articles. (22:62; 15:348)

The above definition of "initial provisioning" stated that the time period covered was the "initial period ... service." This is a key point, discussed later. The next section defines the term PROVISIONING.

### b) *Provisioning*

Neither the DFARS nor the FAR uses the term "initial provisioning," but each uses the term PROVISIONING. The DFARS' definition of PROVISIONING is "the process of determining and acquiring the range and quantity of spare and repair parts, and support and test equipment required to operate and maintain an end item for an initial period of time" (20; 28).

The *Glossary* (22:111), the *ASD Workbook* (13:68.25), and *The Dictionary of Cost Estimating Terms and Phrases* (52:118) contain similar definitions of PROVISIONING. The *Glossary* adds that PROVISIONING "Usually refers to first outfitting of a ship, unit or system."

The inconsistency between the definitions for "initial provisioning" and PROVISIONING is that both claim the time period covers the "initial period of time," leaving the researcher wondering, "What is the difference between them if both terms cover the "initial period of time?"

The *Desktop Guide* provides additional insight where it states PROVISIONING is, "The process of determining or meeting the range and quantity of items required to support and maintain or function for a set period of time" (51:48). By using the term "set period of time" in lieu of the word "initial", the *Desktop Guide* provides a point of differentiation between "initial provisioning" and PROVISIONING. A set period of time is not necessarily the first or initial time period. Thus, PROVISIONING and "initial provisioning" are not considered identical.

The definition provided by the *Compendium* for the word PROVISIONING, shown below, provides additional insight to help eliminate the confusion.

A management process for determining and acquiring the range and quantity of support items necessary to operate and maintain an end item of material for an initial period of service.

1. The PROVISIONING process begins at the time a production contract is awarded for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.
2. "Initial provisioning" (the first time provisioning for a new end item), follow-on provisioning (a subsequent provisioning of the same end item from the same contractor), and reprovisioning (a subsequent provisioning of the same end item from a different contractor) are specific types of provisioning.
3. PROVISIONING normally does not include the acquisition of support items for replenishment purposes or to augment existing stocks of items already established in the wholesale supply system. (15:560)

The information provided by the *Compendium* about the PROVISIONING process, makes it clear that the "initial period of service" refers the time period covered in sub¶ 1 (from production

contract awarded through the period of time required to have support items shipped by manufacturers and suppliers). As described in subparagraph 2, "initial provisioning" is the first time a new end item is provisioned. Thus, the word "initial" should not be used when describing the entire PROVISIONING time period, because the reader may incorrectly infer that PROVISIONING means only the first set of provisioned items. This may or may not be a correct assumption. PROVISIONING and "initial provisioning" will be the same only when provisioning for an individual end item takes place just once during the provisioning process.

The proposed synthesized definition defines PROVISIONING and includes the three subsets of provisioning (initial, follow-on, and reprovisioning) within the PROVISIONING process. The proposed synthesized definition of PROVISIONING, shown below, is based on the definition contained in the *Compendium* modified as considered appropriate by the researchers.

The process of determining and acquiring the range and quantity of spare and repair parts, special tools, test equipment, and support equipment necessary to operate, support, and maintain an end item of material for a set period of service. Its phases include the identification of items of supply; the establishment of data for catalog, technical manual and allowance list preparation; and, the preparation of instructions to assure delivery of necessary support items with related end articles.

1. The provisioning process begins at the time a production contract is awarded for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.
2. Specific types of provisioning are; initial provisioning, follow-on provisioning, and reprovisioning. Initial provisioning is the first time provisioning for a new end item. Follow-on provisioning is a subsequent provisioning of the same end item from the same contractor. Reprovisioning is a subsequent provisioning of the same end item from a different contractor.
3. Provisioning normally does not include the acquisition of support items for replenishment purposes or for augmentation of existing stocks of items already established in the wholesale supply system.

Synonyms: Outfitting.

Antonyms: Replenishment of Spares.

## **19. Prudent Business Person**

A published definition of the term PRUDENT BUSINESS PERSON was not found in the literature review. However, three similar terms were found. They are, "prudent business man concept" (definition provided below), "reasonable care" (6:1265), and "reasonable man doctrine or standard" (6:1266). A fourth term, "prudent man rule" (6:1226), applies to the investment community not the acquisition or contracting field.

The Cannaday definition of the term, "prudent businessman concept," was published in the *Desktop Guide* and offers a contracting perspective of what a PRUDENT BUSINESS PERSON is. The definition emphasizes the important concept that a PRUDENT BUSINESS PERSON should base his or her decisions on sound fiduciary or business principles.

Phrase used as a measure of reasonableness in assessing an offer or counteroffer or other action taken under a contract. Related to making a procurement decision based on sound fiduciary or business principles. (8:107; 51:50)

Providing a synthesized definition of the term PRUDENT BUSINESS PERSON will not contribute any value since the definition of the synonymous term "prudent businessman concept," has already been developed and validated by consensus. Therefore, it is recommended that:

- the term, PRUDENT BUSINESS PERSON, be deleted from the Master Listing; and
- the previous synthesized term "prudent businessman concept" be changed to read "prudent business person concept." This change would make the term gender neutral.

## **20. Rights In Technical Data**

According to DFARS 227.402-72, "There are three basic types of rights which apply to technical data delivered under contract to the government. These are unlimited rights, limited rights, and government purpose license rights" (20; 28).

The *Glossary* defines RIGHTS IN TECHNICAL DATA as:

The right for the government to acquire technical data. If the government has funded or will fund a part of or the entire development of the item, component, or process, then the government is entitled to unlimited rights in the TD. However, if the above is developed by a contractor or subcontractor exclusively at private ex-

pense, the government is entitled to limited rights. Such data must be unpublished and identified as limited rights data. See also: Limited Rights, Government Purpose License Rights, and Unlimited Rights. (22:119)

The *Desktop Guide's* (51:51) definition of RIGHTS IN TECHNICAL DATA is essentially the same as the *Glossary's* and will not be directly quoted.

According to the *Reference Book*,

The Government's rights to make various uses of Technical Data. Very broadly speaking, if the Government has funded or will fund development of an item, component, or process, the Government may gain entitlement to Unlimited Rights in the technical data. If, in contrast, a contractor or subcontractor developed the item, component, or process at private expense, the Government may be entitled only to Limited Rights in the technical data. (48:346)

The distinction is important, since data delivered with "Unlimited Rights" may be disclosed to competing contractors, whereas "Limited Rights Data" are considered proprietary and must be protected. . .The DoD may also agree to accept technical data subject to "Government-Purpose License Rights" (48:346).

The literature review has revealed that the above three types of RIGHTS IN TECHNICAL DATA exist. "Unlimited Rights" and "Limited Rights" were both previously synthesized in a 1992 Master's thesis by Padgett and Bayless (57:179,184). Consequently, the terms "Unlimited Rights" and "Limited Rights" did not need to be investigated further. However, "Government Purpose License Rights" is not on the Master Listing of contracting terms and has not been synthesized. We recommend that the term "Government Purpose License Rights" be included in the final dictionary using the following definition this is the last scheduled thesis defining contracting or acquisition related terms in the NCMA Dictionary Project. See the "Government Purpose License Rights" section for further details.

Based on the DFARS definition, the proposed synthesized definition for RIGHTS IN TECHNICAL DATA is:

There are three basic types of rights which apply to technical data delivered under contract to the government. See Unlimited Rights, Limited Rights, and Government Purpose License Rights.

Synonyms: None.

Antonyms: None.

## 21. Risk Analysis

The Master Listing of contracting terms has four risk related terms. The four terms are RISK ANALYSIS, RISK MANAGEMENT, "risk," and "risk assessment." Synthesized definitions of the first two terms will be developed in this thesis. "Risk" and "risk assessment" definitions have been synthesized in previous theses. Their synthesized definitions will be furnished so the reader will have greater insight into "risk" related terminology.

The following synthesized definition of "risk" was developed in 1989 by Daniel Lee Downs of the Naval Postgraduate School in his Masters Thesis, *A Dictionary of Acquisition and Contracting Terms*. The final consensus definition of "risk" is:

The degree of uncertainty in an undertaking. It is the function of the likelihood of consequential events occurring and the consequences of the events on the objectives. (26:47)

"Risk assessment," shown below, was synthesized in 1990 in Randal Indvik's Masters Thesis for AFIT, *Dictionary of Contracting and Acquisition Terms Related to the Pre-Award Phase of Contracting*.

The process of subjectively determining the probability that a specific interplay of performance, schedule, and cost as an objective will or will not be attained along with the planned course of action. (36:52)

The rest of this section discusses RISK ANALYSIS. The *Dictionary of Cost Estimating Terms & Phrases* defines RISK ANALYSIS as:

The evaluation of the situation, environment, or set of conditions to determine the technical, financial, or business risks inherent in the venture or mission. Can be computed using complex models, expert opinions, or intuitive judgment. (52:128)

The *Glossary* provides a complementary definition of RISK ANALYSIS, "An examination of risk areas or events to determine options and the probable consequences for each event in the analysis" (22:119).

The *Systems Engineering Management Guide* states that the purpose of RISK ANALYSIS is to discover the cause, effects, and magnitude of the perceived risk, and to develop, examine, select, and manage options to reduce program risk. RISK ANALYSIS is a subset of RISK MANAGEMENT (24:15-7, 15-1).

The Defense Systems Management College published a handbook titled *Risk Management Concepts and Guidance* which provides a complementary meaning to the definition in the *Systems Management Guide*. The handbook limits its discussion to RISK MANAGEMENT in the DoD acquisition environment based upon a program manager perspective (23:FW-1). RISK ANALYSIS, according to the RISK MANAGEMENT handbook, involves an examination of the change in consequences caused by changes in the risk input variables. RISK ANALYSIS activities include sensitivity analysis and "what-if" analysis (23:4-9).

Taking all of the above into consideration the following proposed synthesized definition of risk analysis is offered:

An examination of risk areas or events to determine options and the probable consequences for each event in the analysis. Such areas can be computed using complex models, expert opinions, or intuitive judgment.

Synonyms: None.

Antonyms: None.

## 22. Risk Management

Chapter 15 of the *Systems Engineering Management Guide* describes the term RISK MANAGEMENT as set forth below:

RISK MANAGEMENT is an organized means of identifying and measuring risk (risk assessment) and developing, selecting, and managing options (risk analysis) for resolving (risk handling) these risks.

With the addition of planning, identifying, quantifying, and selecting methods to handle the management of risk. . .It is important that RISK MANAGEMENT strategy be established early in a program. . .RISK MANAGEMENT includes several related actions: (1) risk planning, (2) risk assessment, (3) risk analysis, and (4) risk handling. (24:15-1)

The *Glossary* provides a slightly different meaning than that which was presented in the previous material. The *Glossary* describes RISK MANAGEMENT as, "A method of management which concentrates on identifying and controlling the areas or events that cause unwanted change. RISK MANAGEMENT incorporates risk handling techniques as an action that goes beyond risk management" (22:120).

*Risk Management: Concepts and Guidance* concurs that risk management contains four elements; planning, assessment, analysis, and handling. It provides additional insight that implementation of RISK MANAGEMENT should take into consideration the five facets (sources or drivers) of risk. These sources are, technical, supportability, programmatic, cost, and schedule risk (23:FW-1, 2-2, 3-3, 3-7).

The proposed synthesized definition of RISK MANAGEMENT, which incorporates the key concepts mentioned previously is shown below:

The organized process of planning, identifying, and measuring risks; then developing, selecting, and managing options for resolving these risks. Risk drivers such as technical, supportability, programmatic, cost, and schedule factors should be considered and managed at all phases of a system's life cycle.

Synonyms: None.

Antonyms: None.

## 23. Rule 4 File

The literature review indicated the terms "appeal file" and "protest files" have the same meaning. (48:25,347) Therefore, the synthesized definition of the term RULE 4 FILE will take into consideration published definitions for the terms "protest file" and "appeal file." The *Reference Book* defines "appeal file" in the context of Government contracting as:

A file containing all documents pertaining to a Dispute, which Uniform Rule 4 requires the contracting officer to assemble. This file is frequently called the "Rule 4 File." It represents one of the more significant differences between appeals before a Board of Contract Appeals (BCA) and litigation before the U.S. Claims Court (Cl.Ct). The Rule 4 procedure applying only to BCA appeals, is intended to make all pertinent documents immediately available to the contractor and the

BCA. The rule gives the contractor an opportunity to supplement this appeal file. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings; documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. In Protests before the General Services Administration Board of Contract Appeals (GSBCA), an appeal file is called a protest file, containing the same information as discussed here. (48:25)

The *Reference Book* definition includes a number of key concepts: (a) the RULE 4 FILE only applies to cases heard by the BCA; (b) the BCA proceedings are intended to be informal; (c) the RULE 4 FILE is used to expedite the discovery process and the court's decision; (d) the government and the contractor may both include information in the file; and finally, (e) the *Reference Book* definition indicates that the terms RULE 4 FILE, "appeal file" and "protest file" have the same meaning (48:25, 347).

The *Reference Book* definition is lacking in two procedural aspects. The *Reference Book* does not state how long the contracting officer has to assemble the file or the type of documents that should be included in the file. The *Government Contract Guidebook* and the *Desktop Guide* clarify the latter point by indicating that a RULE 4 FILE contains, "the contracting officer's final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Armed Services Board of Contract Appeals." (5:GL-15; 51:51)

DFARS concurs with the information both the *Government Contract Guidebook* and the *Desktop Guide* say should be included in the RULE 4 FILE. In addition, DFARS states the duties of the contracting officer require that "within 30 days of receipt of an appeal, or notice that an appeal has been filed, the contracting officer shall assemble and transmit to the board an appeal file consisting of all documents pertinent to the appeal" (20:A-7; 28).

The proposed synthesized definition of RULE 4 FILE includes all the concepts mentioned previously. The proposed synthesized definition of the term RULE 4 FILE is:

A file containing all pertinent information in a dispute including: the contracting officer's (CO) final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Board of Contract Appeals (BCA). The Rule 4 procedure pertains only to BCA appeals and not to litigation before the U.S. Claims Court. The CO is required, within 30 days of receipt of the complaint (appeal), to assemble and distribute the Rule 4 File to the BCA and the contractor. The contractor has the opportunity to supplement the file within 30 days of its receipt. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings. Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. The Rule 4 File is also called the appeal file or the protest file in protests before the General Services Administration Board of Contract Appeals (GSBCA).

Synonyms: None.

Antonyms: None.

## 24. Section 8(a) Contract

The terms "Section 8(a)" and "8(a)" were derived from Section 8(a) of the Small Business Act, 15 U.S.C. 637(a) (31:153; 17:19.800; 34:52). The specific term SECTION 8 (A) CONTRACT was not found in the literature review. However, a synthesized definition of SECTION 8(A) CONTRACT can be developed since several related terms were found. These related terms include: "Small Disadvantaged Business Concern (SDBC)", "8(a) Program", "Economically Disadvantaged Individuals (EDI)", "Small Business Concern", "Socially Disadvantaged Individuals (SDI)", and "Section 8(a) Subcontract".

The *Desktop Guide* explains that a Section 8(a) subcontract is, "A subcontract between the Small Business Administration and a socially and economically disadvantaged business concern" (51:52). The DESKTOP GUIDE partially explains an key notion. A Section 8(a) contract is between the procuring government agency and the Small Business Administration (SBA). The SBA then subcontracts with the SDBC. The *Reference Book* definition of an 8(a) program, shown below, highlights this idea and includes the concept that the contract must be awarded to a SDBC.

A program...authorizing the SMALL BUSINESS ADMINISTRATION (SBA) to enter into contracts with procuring agencies and award subcontracts for per-

forming those contracts to firms eligible for program participation. SBA's subcontractors, which must be SMALL DISADVANTAGED BUSINESS CONCERNs (SDBCs), are referred to as "8(a) contractors." (48:153)

FAR 19.800 (28; 29) and *Government Contracting Based on the Federal Acquisition Regulation* (64:255) both make similar statements. However, in the experience of the researchers, an 8(A) CONTRACT may take on a slightly different dimension in that it can also be awarded as a tripartite agreement among the above parties to provide required supplies or services to the Government. It is also noted that an "8(a) CONTRACT" may not be awarded if the price of the contract results in a cost to the contracting agency which exceeds its fair market value.

FAR 19.001 defines SDBC, SDI, and EDI. These definitions are long (approximately one page in length), complex, and technical. Therefore, the synthesized definition of Section 8(a) contract will not incorporate the FAR's definition of SDBC, SDI, and EDI in it. However, the concept that a SDBC must be at least 51% unconditionally owned (or must own 51% of the concern's stock) and have its management and daily activities controlled by individuals who are both socially and economically disadvantaged should be included in the synthesized definition of a Section 8(a) contract (28; 29).

The *Reference Book* (48:366), *Government Contracting Based on the Federal Acquisition Regulation* (64:249), and *Keyes* (37:41) SDBC definitions are consistent with the FAR definition of SDBC. Taking the above into consideration the synthesized definition of SECTION 8(A) CONTRACT is:

A contractual arrangement, under section 8(a) of the Small Business Act, 15 U.S.C. 637(a), wherein the Small Business Administration (SBA) is authorized to enter into contracts with government procuring agencies and to award subcontracts for performing those contracts to firms eligible for 8(a) program participation. The arrangement may also take the form of a tripartite agreement among the above parties to provide required supplies or services to the Government. An 8(a) contract may not be awarded if the price of the contract results in a cost to the contracting agency which exceeds its fair market value.

Synonyms: 8(a) Contract.

Antonyms: None.

## 25. Single Source

The literature review indicates that the terms SINGLE SOURCE and "sole source" are synonymous. Therefore, the synthesized definition of SINGLE SOURCE will take into consideration both published single and sole source definitions. The *Desktop Guide* states that a SINGLE SOURCE is, "One source among others in a competitive marketplace which, for justifiable reason, is found to be most advantageous for the purpose of contract award" (51:52). The *Reference Book* describes "sole source" as:

The only source known to be able to perform a contract, or the one source among others that, for justifiable reason, is found to be most advantageous for the purpose of contract award. . . Such an acquisition is normally justified only when there is just one responsible source (see Responsibility) and no other supplies or services will satisfy agency requirements. FAR 6.302-1. Justifying a procurement without obtaining Full and Open Competition does not automatically permit contracting a sole source because FAR 6.301(d) requires contracting officers to solicit offerors from as many potential sources as is practicable in these circumstances. (48:368)

The *Dictionary of Cost Estimating Terms and Phrases* contends that sole source is:

Characterized as the one and only source, regardless of the marketplace, possessing a unique and singularly available performance capability for the purpose of contract award. (Sometimes used interchangeably with the term 'single source'). (52:135)

FAR, the *Desktop Guide*, the *Reference Book*, and the *Glossary* all define "sole source" acquisition as: "A contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source" (28; 29; 51:53; 48:368; 22:124).

Thus there appears to be general agreement on the meaning of single or sole source. The proposed synthesized SINGLE SOURCE definition, listed below, is based on all the above inputs.

The only known source able to perform a contract, or the one source among others that, for justifiable reason, is judged to be most advantageous to the Government for the purpose of contract award. A sole or single source acquisition means a contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source.

Synonyms: Sole Source.

Antonyms: Competition, Competitive Acquisition.

## 26. Substantial Performance

The *Government Contract Guidebook* defines SUBSTANTIAL PERFORMANCE as a "Doctrine which prohibits termination of a contract for default if a contractor's performance deviates only in minor respects from the contract's requirements (5:GL-16). *Black's Law Dictionary* adds the following points:

A doctrine in commercial reasonableness which recognizes that the rendering of a performance which does not exactly meet the terms of the agreement (slight deviation) will be looked upon as fulfillment of the obligation, less the damages which result from any deviation, less the damages which result from the promised performance. . .Substantial performance of a contract is shown when party alleging substantial performance has made a honest endeavor in good faith to perform his part of the contract, and when results of his endeavor are beneficial to other party, and when such benefits are retained by the other party; if any one of these circumstances is not established the performance is not substantial, and the party has no right of recovery. (6:1429)

The *Reference Book* and *Keyes* concepts are both consistent with the above definitions. However, both the *Reference Book* and *Keyes* used different terminology when describing the unsatisfied contract requirement. The *Reference Book* proclaims it "minor and relatively unimportant deviations" (48:384) and *Keyes* uses the words "trivial condition" as a descriptor (37:87).

There is general agreement among the sources as to the meaning of SUBSTANTIAL PERFORMANCE. The proposed synthesized definition incorporates key points from all the sources to enhance the meaning:

A doctrine that recognizes the contractor's performance when slight, trivial, or minor deviations from the terms of an agreement occur. The Government shall pay the contractor the amount obligated under contract, less damages which result from any deviation from the promised performance. The Government is prohibited from terminating the contract for default if substantial performance exists. Three conditions must be present in order to conform with the substantial performance doctrine. First, the contractor must have made a good faith attempt to perform to the contract requirements. Second, results of the contractor's endeavor must be beneficial to the government. Finally, benefits must be retained by the government.

Synonyms: Substantial Compliance, Substantial Completion.

Antonyms: None.

## 27. System Specification Baseline

An extensive literature review for this term resulted in finding no published definitions. Dr. William C. Pursch instructed us to develop our own definition. We consulted with various professionals ranging from AFIT professors and students to Aeronautical Systems Center (ASC) engineers and contracting personnel. The phone and personal interviews consisted of open-ended questions such as: "What is a SYSTEM SPECIFICATION BASELINE? Have you ever use or seen this term?" The informal survey was performed to see if anyone used this term and to help us derive a synthesized definition.

No one contacted knew for sure what a SYSTEM SPECIFICATION BASELINE is. However, their answers basically fell into three categories. Of those interviewed, six people had no idea what a SYSTEM SPECIFICATION BASELINE is; two people thought a SYSTEM SPECIFICATION BASELINE was the baseline established in the contract; and seven people thought a SYSTEM SPECIFICATION BASELINE had something to do with configuration management baselines (functional, allocated, or product baselines).

After interviewing the fifteen professionals, the responses were reviewed and brainstormed with AFIT professor Dr. Norman Ware (66). We concluded that a SYSTEM SPECIFICATION BASELINE must be similar to or the same as a functional baseline. Therefore, our self-developed synthesized definition of a SYSTEM SPECIFICATION BASELINE is:

A baseline, more commonly known as the functional baseline, agreed upon by the contractor and the government that establishes the system level specification which defines a system's technical, performance, design, or mission requirements.

Synonyms: None.

Antonyms: None.

## **28. Unpriced**

This specific term was not found during the literature review. However, the terms "Unpriced Purchase Order" (UPO), "Letter Contract," and "Undefinitized Contractual [or Contracting] Action" (UCA) were found in the literature review and are related to the term UNPRICED.

FAR 13.502 defines a UPO as, "an order for supplies or services, the price of which is not established at the time of issuance of the order" (28; 29). The *Reference Book* (48:413) and Keyes (37:15) predicated their UPO definitions on the FAR 13.502. The main concept is the purchase order price is not set at the time an order is placed. Padgett and Bayless, shown below, derived a synthesized consensus definition of Undefinitized Contracting Action.

A contract action entered into which, although authorized, is not fully negotiated with respect to at least one of its contractual terms (specifications, cost or price, delivery schedule, etc.) prior to the initiation of performance. It has been agreed by the parties concerned that these unresolved terms must be negotiated/finalized in the relative future. The most typical examples of such an action would include letter contracts, or "Change Orders" issued pursuant to the "Changes" clause found within government contracts. (57:183)

Dean R. Matro's Master's Thesis entitled, *A Lexicon of Contracting Terms: Contract Types*, (September 1990), contained a synthesized definition of the term "Letter Contract." His definition stated that a letter contact "authorizes the contractor to commence work, incur costs and make commitments pending definitization for a fixed-price or cost reimbursement pricing arrangement" (45:122).

UPOs, Letter Contracts, and UCAs are all are specific actions that authorize a party (the contractor) to deliver a good or service but, do not at the time of issuance, set a price for that good or service. Therefore, unpriced can be generically defined. The synthesized definition of UNPRICED is:

A term used to denote an action that requests or commits the contractor to provide an item or service, but does not, at the time of issuance, establish a definite price

for that item or service. Examples of unpriced actions include letter contracts, un-definitized contractual action, and unpriced purchase orders.

Synonyms: None.

Antonyms: None.

## 29. Work Measurement Standards

Lane K. Anderson, in the book *Accounting for Government Contracts Cost Accounting Standards*, defines "Work Measurement Time Standards", under MIL-STD-1567, as: the time it should take a normally skilled operator, following a prescribed method and working at a normal all-day level of effort, to complete a defined task with acceptable quality. Because the standard is established for an all-day level of effort, allowances are made for non productive time. Allowances are made for the following: (1) need for personal time (restroom, coffee, smoking, and so forth); (2) fatigue that occurs near the end of a shift; and (3) minor, unavoidable, and unpredictable delays that are not under the workers control (4:16-43).

McCann concurs with the above definition (44:13-10). Basically, a WORK MEASUREMENT STANDARD is derived by taking normal time and adding time for personal (breaks), fatigue, and uncontrollable delays.

McCann and Anderson also indicate that Work Measurement Time Standards are classified as either Type I (engineering standards) or Type II (estimated or non-engineering standards). A Type I standard is established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard. Type II standards are those not meeting the above criteria and are usually determined by estimates or based on historical data (44-13-10; 4:16-44).

Other sources provided a less through explanations but, were consistent with both McCann and Anderson. For example, the *Glossary* states the work measurement objective is "to determine

how long it should take an employee to perform his/her work and to identify opportunities for improvement" (22:148).

The *Dictionary of Cost Estimating Terms and Phrases* adds a standard is "an established or accepted rule, measure, model, definition, or procedure by which the degree of satisfying a product or act is determined." The *Dictionary* also explains a work standard is the "number of manhours selected to accomplish each work unit for the purpose of appraising an operation" (51:136,157). McCann agrees and adds a, "standard is a term applied, in work measurement, to any established or accepted rule, model, or criterion against which comparisons are made" (44:B-17).

The following proposed synthesized definition of WORK MEASUREMENT STANDARDS incorporates the essential elements mentioned previously:

A method for evaluating efficiency by defining typical or "standard" hours to perform a task and comparing them to actual time used. The comparisons are used to compute efficiency and performance or realization factors. The term standard, in work measurement, is applied to any established or accepted rule, model, or criterion against which comparisons are made.

Labor time standards are composed of the time allowed for a normally skilled worker following a prescribed method and working at a normal all-day level of effort, to complete a defined task with acceptable quality plus allowances. Allowances include time for personal time, fatigue, and minor, unavoidable, and unpredictable delays that are not under the workers control. MIL-STD 1567A recognizes two types of work measurement standards:

- Type I (*Engineered*) standards are established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard.
- Type II (*Estimated or Non-Engineered*) standards are those not meeting the criteria for Type I and are usually determined by estimates based on experience or historical data.

Synonyms: None.

Antonyms: None.

### **30. Z-factor**

The literature review has indicated that the term Z-FACTOR is not specifically an acquisition or a contracting related term, but merely a term synonymous with the term "Z-Value" commonly used in statistics. This term is being eliminated from the NCMA's Master Listing of contracting and acquisition terms for the following two reasons.

- First, Z-FACTOR is a statistical term. The purpose of this thesis is to define acquisition and contracting terms, not statistical terms.
- Second, Chapter III states the Certified Professional Contracts Managers (CPCMs) will be surveyed to derive a consensus definition.

CPCMs are considered experts in the contracting and acquisition professions. Generally, they are not statisticians. Thus, surveying CPCMs for a definitive meaning for the term Z-FACTOR is not likely to produce valid results. In addition, the CPCMs are busy professionals who have stringent time constraints placed upon them. The researchers feel that including a question about a term about which the majority of CPCMs are not normally qualified to voice an expert opinion, will only increase their time commitment and frustration level in answering the survey. This could increase the survey's nonresponse rate.

In conclusion, the term Z-FACTOR will not be analyzed any further and will not be included in the survey. We recommend that this term be dropped from NCMA's Master Listing of contracting terms.

### **G. Additions, Changes, and Deletion of Terms from the Master Listing**

Since this thesis is the last one scheduled to define contracting and acquisition related terms from the found on the NCMA's Master Listing, our literature review also consisted of a quality check to ensure that the remaining terms were consistent with and complementary to the Master Listing of contracting terms originally developed by William J. Hauf. As a result of this quality check, several terms were either added to the Master Listing of contracting terms (i.e., INDUSTRIAL PLANT EQUIPMENT and GOVERNMENT PURPOSE LICENSE RIGHTS) or deleted therefrom (i.e., EXPERIENCE CURVE, PRUDENT BUSINESS PERSON, and Z-FACTOR). In addition,

the terms INITIAL PROVISIONING and PROCUREMENT PLANNING were changed to PROVISIONING and ACQUISITION PLANNING, respectively, and AGENCY PECULIAR EQUIPMENT was changed to AGENCY PECULIAR PROPERTY to recognize the more commonly used term. For further details about any of the above terms, see their individual written analyses provided earlier in this chapter.

## **H. Literature Review of Additional Unresearched Terms**

In an additional effort, a review and comparison of the terms contained in the NCMA *Desktop Guide to Basic Contracting Terms* (51), and Hauf's Master List of Contracting Terms (35), as amended by later researchers, to identify any terms that have not been subjected to the scientific research method of validation. As a result of this initiative, over 600 additional terms were identified as candidates for examination of their definitions by a random body of experts to reach consensus on current usage.

## **I. Summary**

Chapter I set the stage for this thesis. The intent of this effort is to develop an operational definition of selected "terms" or "concepts" in the context of government acquisition and its related disciplines. Chapter II summarizes the results of the literature review conducted to meet this intent. It supplies a brief description of the research and analysis which provided the basis for the proposed synthesized definitions for each term to be examined by the survey populations. Chapter III and Appendix A describe the manner in which the methodology to obtain consensus on the final definitions for these terms was established. Chapter IV describes the data analysis of the surveys conducted and Chapter V provides the conclusions and recommendations of the researchers.

## **III. METHODOLOGY**

### **A. Introduction**

The methodology used in this thesis will closely parallel the methodology established at the beginning of the dictionary project as modified by later researchers and described more fully below and in Appendix A hereof. The procedure by which consensus definitions are developed was addressed briefly in Chapters I and II. This chapter provides a more comprehensive explanation of the research methodology used in the accomplishment of this and previous thesis efforts.

### **B. Methodology Overview**

Inasmuch as the previous efforts have established and validated an essentially common methodology, the current researchers feel it is appropriate to continue to use the same methodology (with only minor variations specifically suggested by Spalding and Cushing (61:5-4 to 5-5) to enhance its effectiveness). This chapter summarizes selection of the survey population, development and administration of the survey instrument, and establishment of decision rules for the analysis of survey responses. The investigative questions to be answered and the methodology we intend to follow are described in detail in Appendix A.

The remaining paragraphs in this section briefly explain the process of deriving the synthesized consensus definitions and explains the recommended variations in methodology this thesis will incorporate. Further clarification of the methodology may be found described in detail in Appendix A.

### **C. Detailed Methodology**

#### **1. The Process**

The process of deriving a synthesized consensus definition for each term can be explained in the following seven steps. Each step is summarized in paragraph 2., below, and described in detail in Appendix A.

- a) Selection of Terms
- b) Performance of Literature Review
- c) Analysis of Literature Review
- d) Derivation of Proposed Synthesized Definitions
- e) Survey Population and Sample Derivations
- f) Description of Surveys
- g) Deviations from Previous Methodology
- h) Analysis of Surveys
- i) Second Survey(s)

## 2. Definitions.

### a) Selection of Terms.

Each term was selected from Hauf's "Master Listing" of acquisition and contracting related terms. This thesis took the last terms available. The selected terms are listed in Chapter II, immediately preceding the Literature Review.

### b) Performance of Literature Review.

An independent literature review was conducted for each term. An explanation of the preferred published sources is clarified in Chapter I under investigative question 1. The results of the literature review, located in Chapter II, answer investigative question 1 for each of the acquisition related terms.

### c) Analysis of Literature Review.

Chapter II includes a summary of the analysis performed for each term. These analyses answered investigative questions 2-5.

**d) Derivation of the Proposed Synthesized Definitions.**

A proposed synthesized definition for each term was developed based on the analysis conducted in the previous step and was used to conduct the surveys.

**e) Survey Population and Sample Derivation.**

The sample from the survey population of currently active NCMA Certified Professional Contracting Managers (CPCMs) was derived from a list supplied by the NCMA. The precise sample size of 145 randomly selected, currently active CPCMs was determined using the formula and methodology discussed on page 6 of Appendix A. CPCMs are considered knowledgeable contracting professionals, highly qualified to pass judgment on the subject at hand, based on their passing NCMA's rigorous professional examination and meeting stringent educational prerequisites. This population and general methodology have been validated as meaningful by repeated surveys during the life of this project.

*(1) Added Constraint*

Previous researchers did not make the distinction that CPCM members must be current NCMA members. As a result their response rates were artificially lowered because earlier mailing lists included:

- some members with inaccurate addresses,
- some who had changed career fields and were no longer actively involved in contracting, and
- some who were deceased.

Including only current NCMA members, as recommended by Spalding & Cushing was intended to increase the survey response rate and add to its validity. Therefore, the methodology for this thesis has the added constraint that only CPCMs who are current members were included in the survey's population.

**f) Description of Surveys.**

A mail survey to a representative random sample of contracting professionals was previously established as the best method to derive consensus definitions for this continuing study

effort. Definitions need to be read and digested before making a appraisal of their validity, rather than verbalized during a face-to-face interview or heard over the telephone during a telephone survey. This is not the type of research that allows for snap judgments. The details of this conclusion are listed on pages 2-5 of Appendix A.

*(1) Initial Surveys*

There were two initial surveys sent to the population described above. Survey A consisted of twenty-five terms and Survey B consisted of the twenty-seven terms remaining after the results of the literature review were analyzed. Segregation of the terms into two surveys was expected to increase the response rate and the quality of the responses, based on perceived time constraints of the respondents.

*(2) First Follow Ups*

Follow ups (one week after the initial surveys) were then used to remind respondents of the importance of their participation in the survey. Such follow-ups are recommended in the Dillman technique which is fully explained in pages 4-5 of Appendix A.

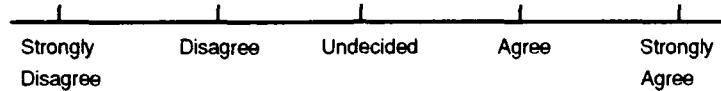
*(3) Second Follow Ups*

Then, one month after the mailing of the initial surveys, a second copy of the survey was sent to the respondents who did not respond to the initial survey along with a letter again reminding them that their input was essential to the success of this project.

**g) Deviations from Previous Methodology**

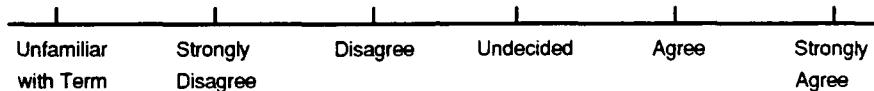
*(1) Change in Format*

Copies of Surveys A & B and associated correspondence are included as Appendices B and C, respectively, to this thesis. The survey structure is based on Spalding & Cushing's survey development (pages 7 and 8 of Appendix A) with two exceptions. The first exception involves a change to the format of the Likert scale used previously:



These researchers felt that, "respondents often selected "[undecided]" on the Likert scale when they were unfamiliar with a particular term, since no more appropriate option on the scale was offered." They concluded, "If such an option were offered, it would provide the ability to differentiate. . .real ambivalence about a definition from simple lack of familiarity."

The revised Likert type scale is shown below:



(Note: The numerical values sometimes associated with a Likert scale are not included here. This is to remain consistent with the qualitative nature of this and previous research as detailed in Appendix A.)

### *(2) Change in Calculation.*

The second exception, also recommended by Spalding & Cushing, is that the new choice, "unfamiliar with term," be excluded from calculations determining the level of consensus associated with that term. The calculation is described in detail on page 8 in Appendix A. The associated, proposed Decision Rule is:

3. "Those who identify themselves as unfamiliar with a term will be excluded from calculations determining the level of consensus associated with that term."

### *(3) Survey Deviation Overview.*

The previous paragraphs explain how the survey population, scale format and method of calculating the level of consensus for this thesis differ from Spalding & Cushing's methodology. A summary of the differences is shown below:

**Table 3-1: SUMMARY OF DIFFERENCES**

	S&C's Thesis	This Thesis
Must CPCMs surveyed be current members of NCMA?	No	Yes
Can respondents select "Unfamiliar with Term"?	No	Yes
Are those who select "Unfamiliar with Term" excluded from consensus calculation?	No	Yes

**h) Analysis of Surveys**

The survey responses were examined, analyzed and categorized. The results of the analysis are discussed, in detail, in Chapter IV. Each proposed synthesized definition, depending on the initial survey results, has either

- been modified to reflect the survey's recommended changes; or
- been used as the final synthesized consensus definition.

It is noted that, to maintain consistency, we followed the procedure described by Randal G. Indvik, in his Master's Thesis, *Dictionary of Contracting and Acquisition Terms Related to the Pre-Award Phase of Contracting*, (September, 1990) with regard to incorporation of comments. Indvik said,

Respondent comments will be analyzed for conceptual and grammatical content. The incorporation of respondent comments into the proposed definition of each term will depend upon the following factors:

1. The level of respondent agreement, as indicated by the survey document, with the synthesized definitions.
2. The number of similar suggestions made by the respondents to improve the definition of a specific term.
3. The merits of a suggestion as defined and supported by individual respondent(s). (36:66)

Chapter IV of this thesis discusses analysis of the data gathered using the above methodology. Simply, the proposed synthesized definitions that reached a consensus and have either no comments or unsupportable comments are used verbatim as the final consensus definitions. Where consensus was reached, but comments have a common thread or a useful suggestion was tendered

that improved or made the definition of a specific term clearer, the researchers revised the definitions to reflect the added information.

If consensus was not reached or comments were so extensive as to completely change the meaning of the proposed synthesized definition(s), a second survey containing only the revised definitions was planned to be mailed back to the respondents to see if consensus on the revised definitions could be reached. Procedures for conducting a second survey would mirror those of the first survey(s).

**i) Second Survey(s).**

No "Second" surveys like those described above and in Appendix A were sent in connection with this research effort. The rationale for this decision is discussed in the Summary of this chapter, below.

**D. Summary**

Chapters I and II provided the background for the current research effort and summarized the literature review. This chapter has described the planned methodology for this thesis as it was conducted. Essentially, the proposed synthesized definitions that reached a consensus are used verbatim as the final consensus definitions. Where consensus was reached, but comments had a common thread or a valuable suggestion was tendered for improvement of a specific term, the researchers revised the definitions to reflect the additional knowledge. When it became apparent that only one definition (which is being modified appropriately) did not reach a consensus, and that comments received from knowledgeable contracting professionals, who are considered experts in their field, were sufficient to make suitable revisions where necessary, the decision was made to drop the plan to send out a second survey. Appendix A and the variations listed above in Chapter III detail the methodology that guided this research effort. Complete results of the mail surveys, as they were conducted, and related analyses of the comments received are described in Chapter IV, which follows. Chapter V provides the researchers' conclusions and recommendations.

## IV. DATA ANALYSIS

### A. Introduction

This chapter presents the results of the Surveys A and B (found in Appendices B.1 & B.2, respectively), mailed to randomly selected Certified Professional Contract Managers (CPCM's) as described in Chapter III. Subject to the caveats outlined in Chapters II and III, the terms actually contained in each of the two surveys are listed below:

**Table 4-1. SURVEY TERM LISTS**

<b>Survey A</b>	<b>Survey B</b>
Agency Peculiar Property (APP)	Acquisition Planning
Architect-Engineering (A&E) Contract	Acquisition Streamlining
Co-Development	Allocated Baseline
Concept Exploration	Baseline Cost Estimating (BCE)
Consent to Subcontract	Contractor Inventory
Contract Advisory and Assistance Services (CAAS)	Functional Baseline
Cost/Schedule Control Systems Criteria (C/SCSC)	Government Purpose License Rights (GPLR)
Demonstration and Validation	Industrial Plant Equipment (IPE)
Design/Technical Competition	Office of Federal Procurement Policy (OFPP)
Documentation	Other Plant Equipment (OPE)
Economic Production Rate (EPR)	Plant Clearance Officer (PLCO)
Economic Purchase Quantity (EPQ)	Product Assurance
Educational Service Agreement (ESA)	Product Baseline
Excess Reprocurement Costs	Product Substitution
Fair and Equitable	Progress Payment Inventory
Fair and Reasonable Price	Property Administrator
Full Scale Engineering Development (FSED)	Provisioning
Government Furnished Information (GFI)	Rights in Technical Data
Greatest Value	Risk Analysis
License Agreement	Risk Management
Long-Term Contracting	Rule 4 File
Material Requirements Planning (MRP)	Section 8(a) Contract
Materiel Management	Single Source
Non-Developmental Item (NDI)	Substantial Performance
Pilot Production	System Specification Baseline
	Unpriced
	Work Measurement Standards

Inasmuch as previous theses in this project, have used essentially common methodology to analyze the data gathered by the surveys, the current researchers feel it is appropriate to continue to use a variation of the most recent methodology. In the interest of consistency and efficient time-utilization, Chapter IV of this thesis follows the same general format and uses applicable parts of

the explanatory material employed by Spalding and Cushing in Chapter IV of their 1992 Master's Thesis, *Defining Contract Terms*, (61:4-1 through 4-5). For example, the first sentence of § B., is the same as theirs because it is still applicable to this effort. The only difference is that the present thesis utilizes a graphic rather than a tabular format to summarize both the demographic data and the data gathered for each term related to calculation of each individual consensus rating.

There were a number of revisions to the original list of selected terms. Chapter II, G., "Additions, Changes, and Deletion of Terms from the Master Listing," provides rationale for specific changes. The surveys elicited additional information that made it necessary to add one term to the Survey A list and delete four terms from Survey B. A summary chart showing additions, modifications and deletions, is provided as Appendix E for the edification of the reader. The lists of final proposed definitions (Appendices F.1 and F.2) also reflect these changes. Even so, the lists are still lengthy. As previously explained in Chapter III and Appendix A, the large number of terms being surveyed in this thesis dictated that two surveys be used to avoid overburdening the survey participants.

Surveys A and B were sent to separate groups of 145 CPCM's each. As described in Chapter III, calculations utilizing the methodology and formulae contained in Appendix A, showed that, based on a 90% confidence level with a range of  $\pm 10\%$ , sixty-six responses were necessary to ensure the validity of conclusions associated with the surveys' results. Ninety-seven individual CPCM's responded to Survey A and eighty-eight responded to Survey B. Thus, the number of responses for each survey exceeded the minimum number of 66 required to achieve consensus, and conclusions based on the responses can be considered statistically valid within the stated limits. Since the minimum required response level for each survey was exceeded after the initial mailing and two follow-ups, the final step of the Dillman Technique, sending a follow-up by certified mail (25:163), was not used.

## B. Demographic Information

Each survey requested that the respondents provide demographic data concerning their current employment, primary activity of their current job, primary area of expertise and years of experience in that area of expertise. It is noted that six of the respondents to Survey A left all of the demographic information blank for Questions 1, 2 and 3 and eight of them left Question 4 blank. Also, three of the respondents to Survey B did not provide the requested demographic information for Questions 1, 2 and 3, and eight also left Question 4 blank. The results, in both tabular and graphical formats, follow:

### Question 1. Where are you presently employed?

Table 4-2. TABULAR SUMMARY OF NUMBER OF RESPONSES TO QUESTION 1

Present Employment	Survey A	Survey B	Totals
Government Contracting Activity	43	47	90
Commercial Contracting Activity	32	26	58
Academic Institution	1	2	3
Other	15	10	25
Unmarked	6	3	9
<b>TOTALS</b>	<b>97</b>	<b>88</b>	<b>185</b>

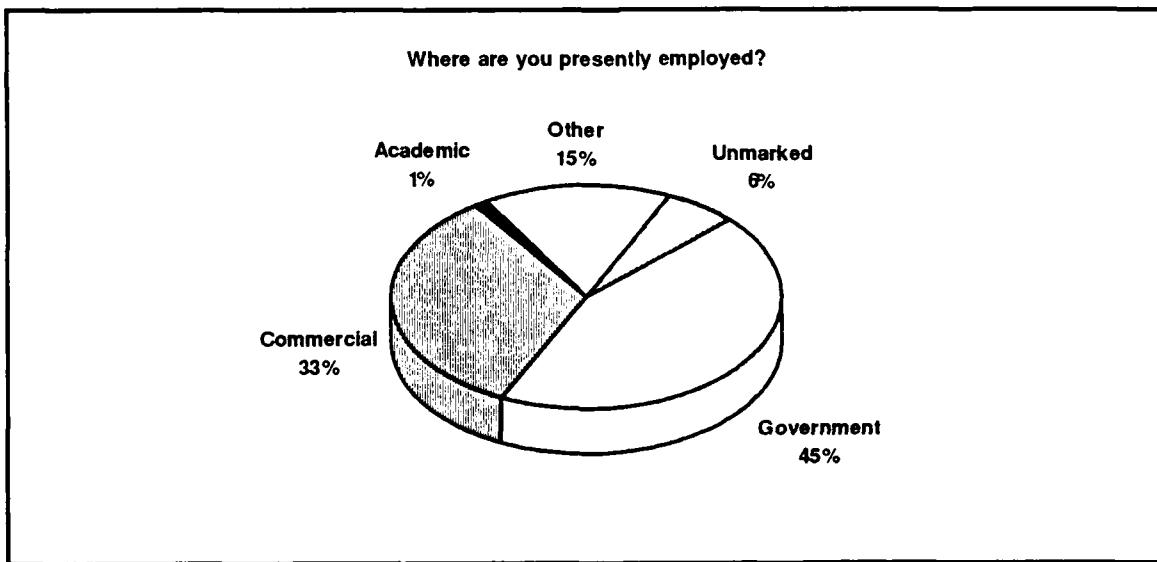


Figure 4-1. Present Employment - Survey "A" Results

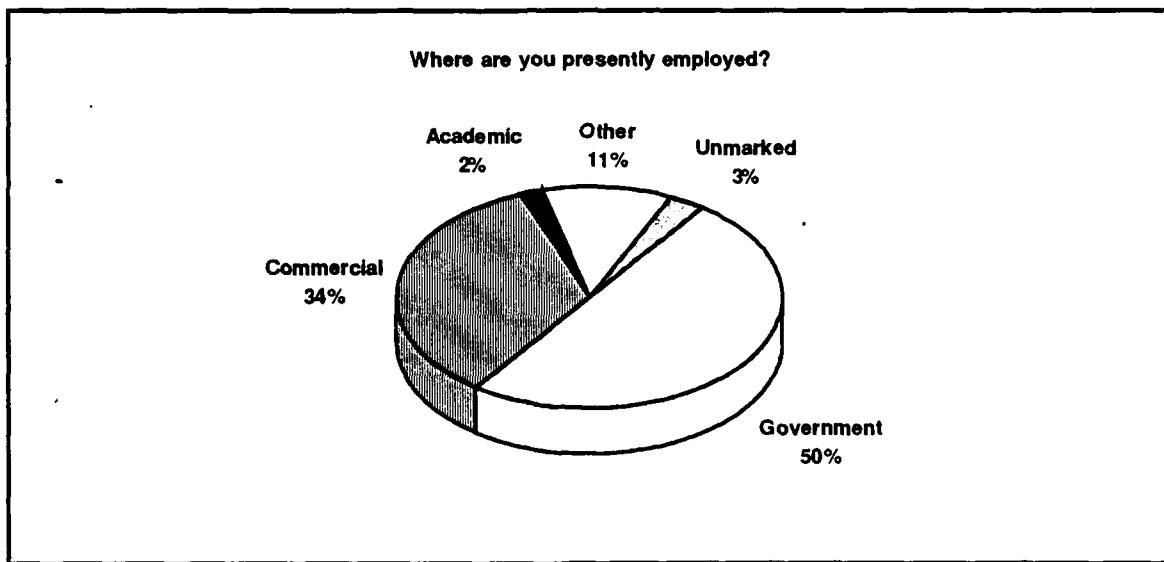


Figure 4-2. Present Employment - Survey "B" Results

**Question 2: What is the primary activity of your current job position?**

**Table 4-3. TABULAR SUMMARY OF NUMBER OF RESPONSES TO QUESTION 2**

<b>Primary Activity</b>	<b>Survey A</b>	<b>Survey B</b>	<b>Totals</b>
Contracting/Acquisition	67	65	132
Manufacturing/Production	3	1	4
Accounting/Audit	4	1	5
Pricing	6	4	10
Engineering	1	0	1
Research	2	0	2
Legal	4	1	5
Other	14	13	27
Unmarked	6	3	9
<b>TOTALS</b>	<b>107</b>	<b>88</b>	<b>195</b>

**Question 3. What is your primary area of expertise?**

**Table 4-4. TABULAR SUMMARY OF NUMBER OF RESPONSES TO QUESTION 3**

<b>Primary Area of Expertise</b>	<b>Survey A</b>	<b>Survey B</b>	<b>Totals</b>
Contracting/Acquisition	80	78	158
Manufacturing/Production	2	1	3
Accounting/Audit	5	1	6
Pricing	5	4	9
Engineering	2	0	2
Research	1	0	1
Legal	4	1	5
Other	4	1	5
Unmarked	6	3	9
<b>TOTALS</b>	<b>109</b>	<b>89</b>	<b>198</b>

On Survey A, several of the respondents marked more than one primary activity and/or more than one primary area of expertise, thus the total numbers of responses for these questions for Survey A are 107 and 109, respectively. On Survey B these totals are 88 and 89, respectively. Survey A results tend to support the notion that contracting experts are involved in multi-faceted jobs since a number of these respondents appeared to be unable to pinpoint a single primary activity. However, Survey B results were not so clear cut. Other pertinent factors that might be examined to support this hypothesis include the fact that in Survey A, 34 responses, out of the total of 101 which were marked (or nearly 34%), indicated the respondent was involved in a current job activity other than Contracting/Acquisition. In Survey B, 23 respondents of the total of 85 marked (or nearly 24%) suggested they were in a similar situation. Further, a number of people (16.25% in Survey A and 16.67% in Survey B), indicated in Question 2 that their primary area of expertise was Contracting/Acquisition, but in Question 3, they said they are employed in other types of positions. Combined graphs of the numbers of responses to Questions 2 and 3 are shown below:

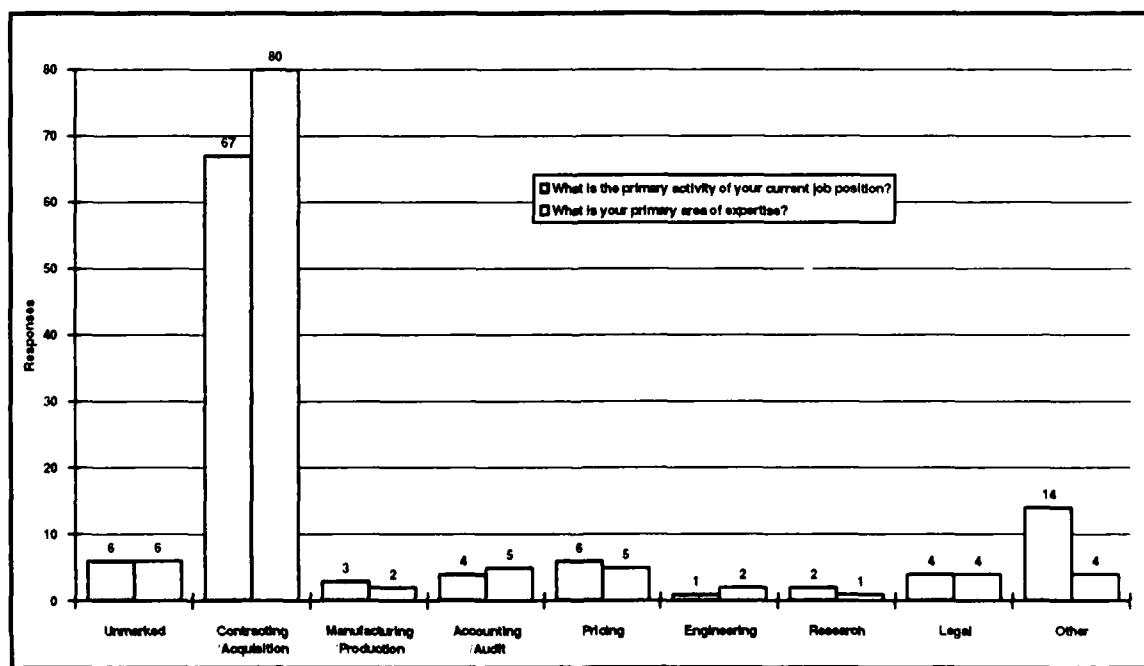


Figure 4-3. Primary Activity and Area of Expertise - Survey "A" Results

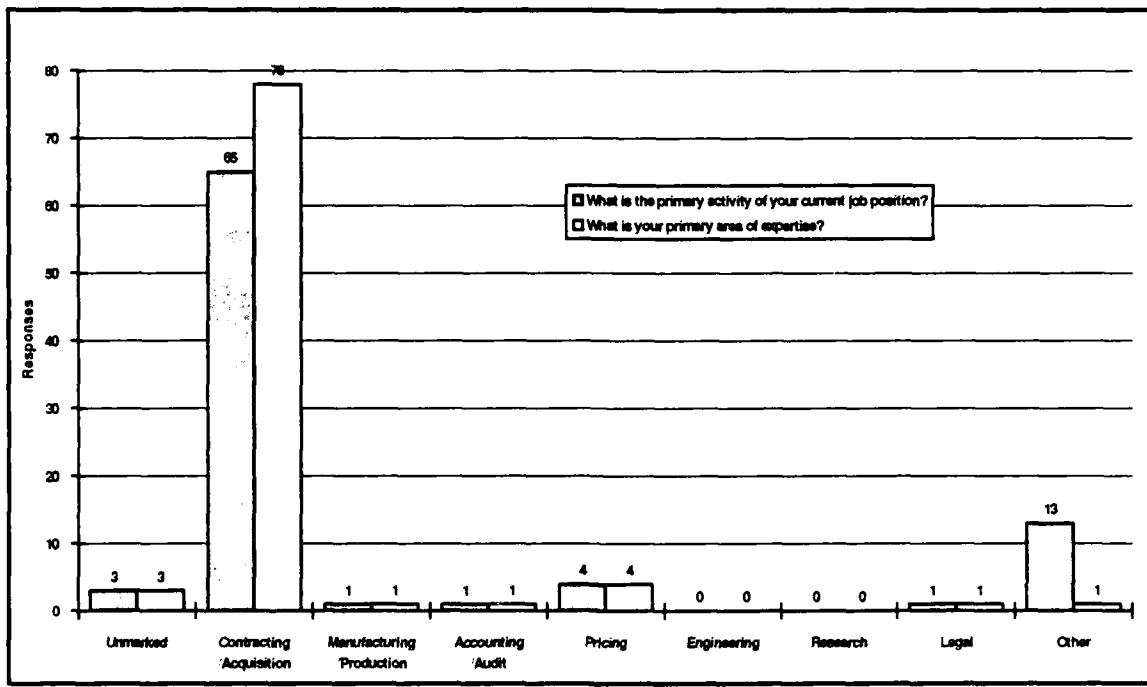


Figure 4-4. Primary Activity and Area of Expertise - Survey "B" Results

**Question 4. How many years of experience do you have in your area of expertise?**

**Table 4-5. TABULAR SUMMARY OF NUMBER OF RESPONSES TO QUESTION 4**

Years of Experience	Survey A	Survey B
5 Years or Less	2	4
6 to 10 Years	19	15
11 to 15 Years	25	15
16 to 20 Years	10	11
Over 20 Years	33	35
Unmarked	8	8
<b>TOTALS</b>	<b>97</b>	<b>88</b>

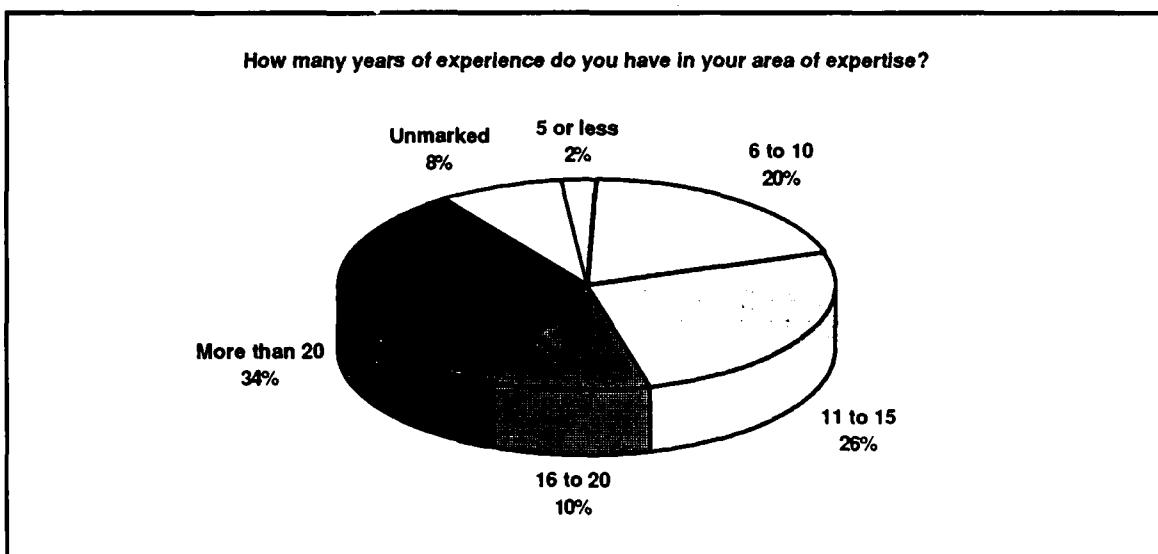


Figure 4-5. Years of Experience -Survey "A" Results

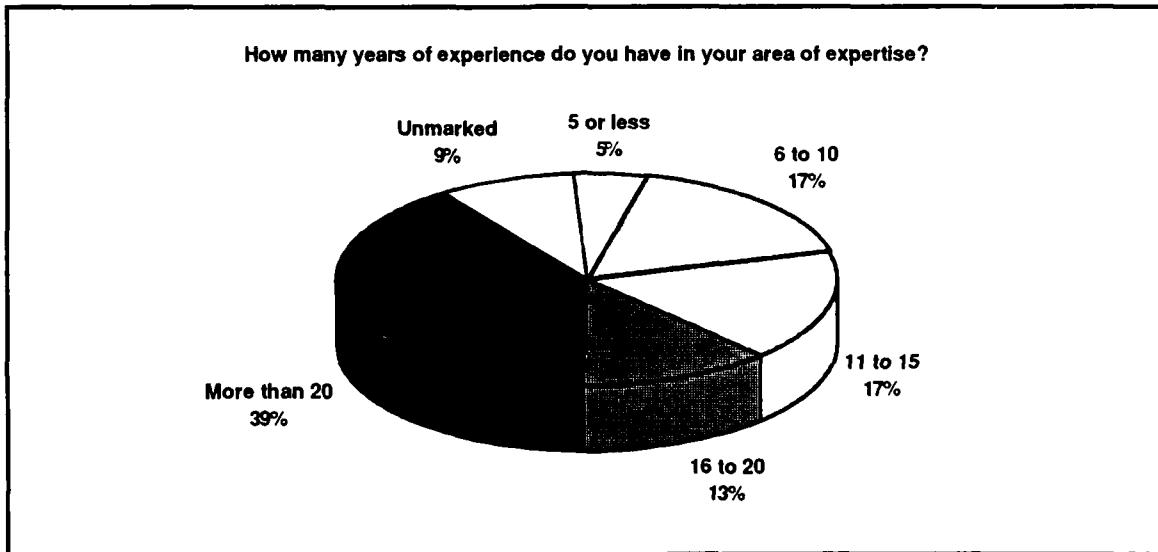


Figure 4-6. Years of Experience - Survey "B" Results

Based on the above data, the reported experience level of the respondents is relatively high. In Survey A approximately 46% of the respondents had over 15 years of experience and 71% had 11 years or more of experience in their area of expertise. Also, approximately 63% of Survey A's respondents indicated that their primary activity was in Contracting/Acquisition and over 73% of them reported that this was their primary area of expertise. Comparable response rates from Survey B indicated 52% had over 15 years of experience 69% had 11 years or more of experience

in their area of expertise. For Survey B, almost 74% of the respondents indicated that their primary activity was in Contracting/Acquisition and nearly 88% of them reported that this was their primary area of expertise.

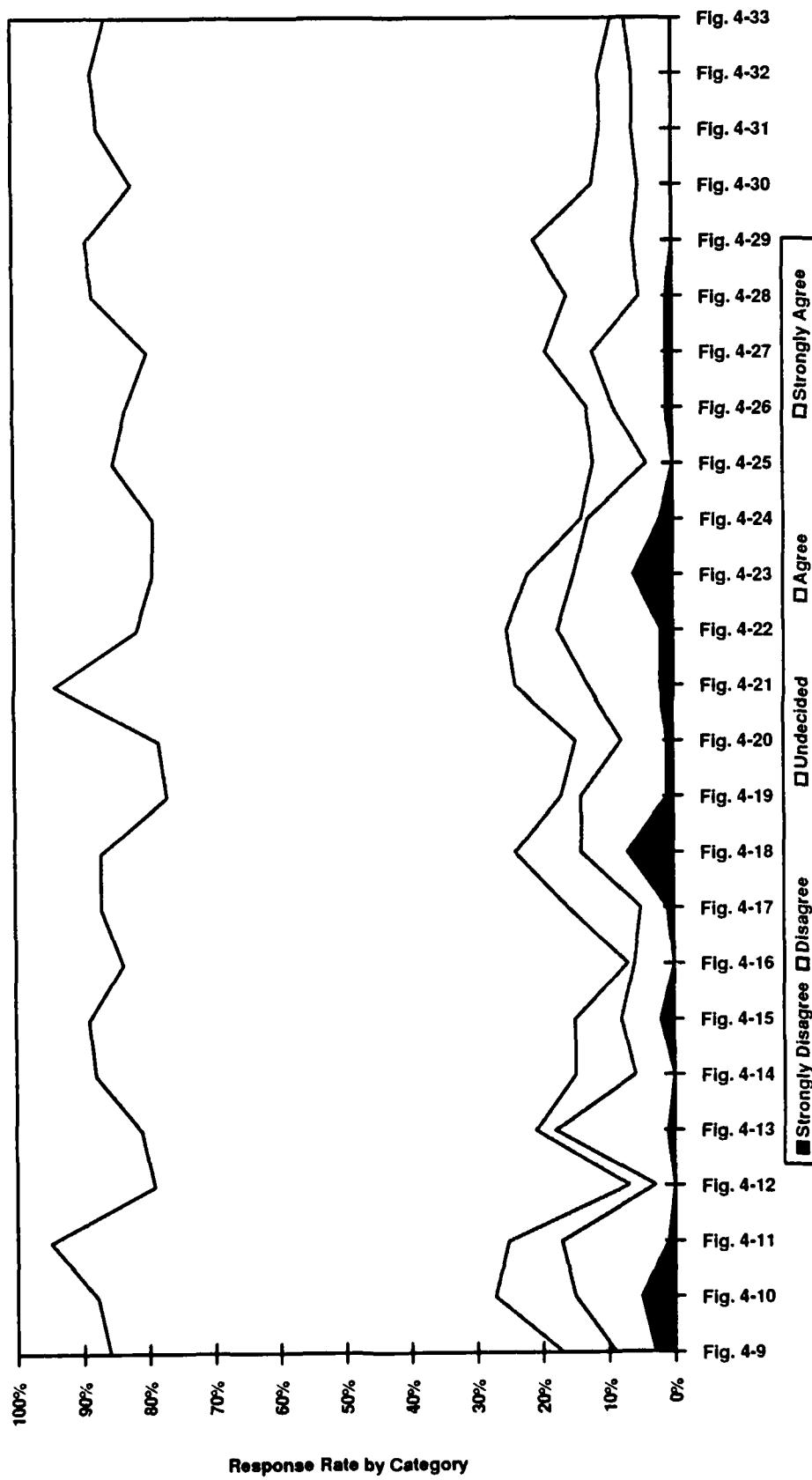
The demographic data, taken as a whole indicate that the survey respondents generally have the appropriate background and experience level to ensure a high level of quality in the survey responses where they were familiar with the terms. By including the "Unfamiliar with Term" category on the Likert scale discussed in Chapter III, those who were indeed unfamiliar with a particular term could self-select their level of knowledge and thus not skew the rate of response as a result of that unfamiliarity. The respondents' comments were generally very helpful, and constitute an important contribution to this thesis effort.

### C. Analysis Format

Chapter III of this thesis stated that consensus for a term would be considered achieved when approximately two-thirds (67%) of the respondents selected "Strongly Agree" or "Agree" on a Likert Scale presented in conjunction with that term's proposed definition. Chapter III further stated that if consensus was not forthcoming on the initial round of surveys, a modified Delphi technique would be used to attempt to achieve consensus. Consensus was reached for all terms in both surveys, with the exception of CONTRACTOR INVENTORY, from the initial round of surveys. A determination was made to delete this term from the final proposed definition list. Details concerning this determination are set forth later in this chapter.

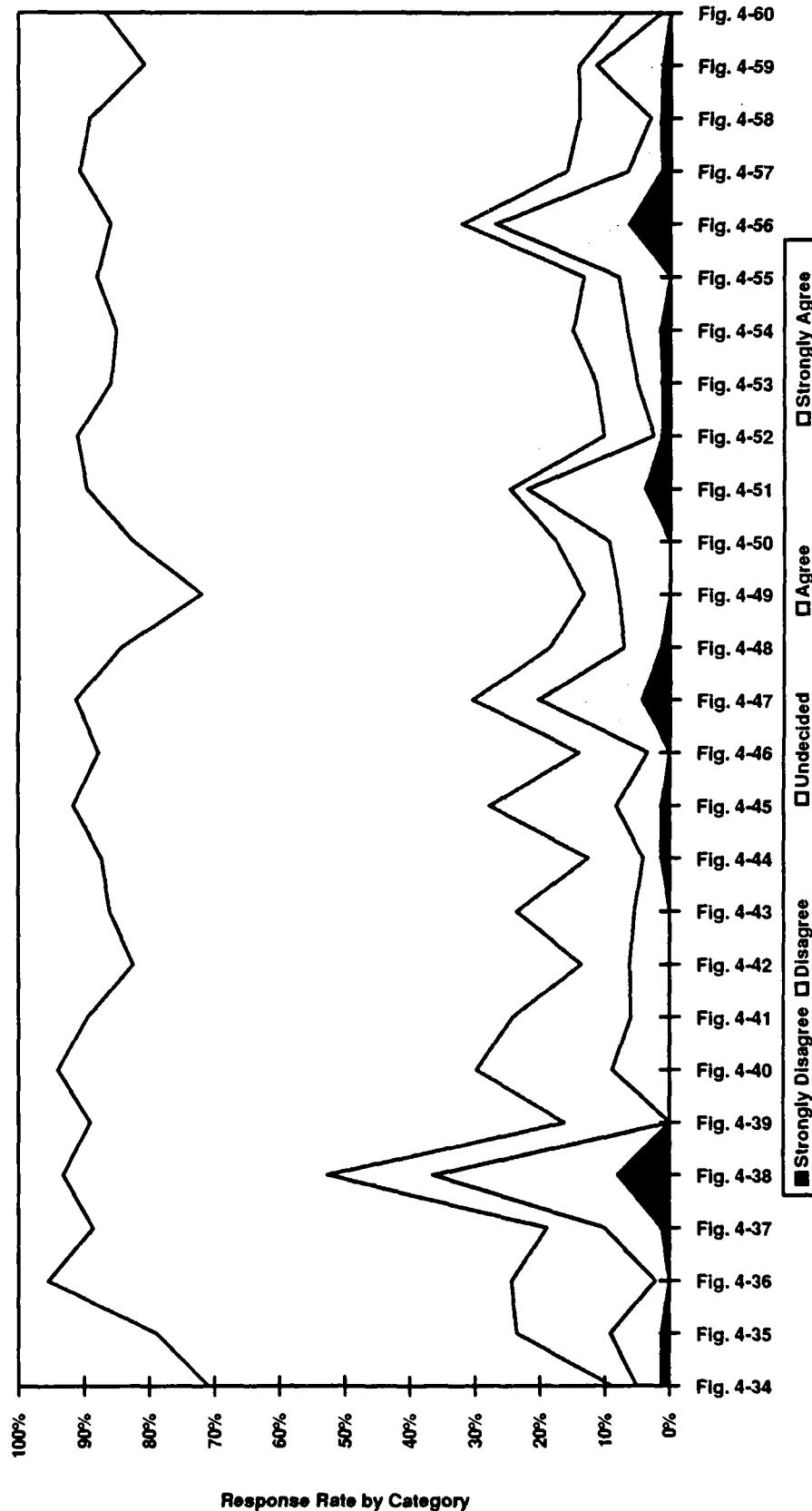
Two summary charts, one for each survey, compress the rates of response for all of the terms surveyed into quick one-page graphical representations of the results. They are presented on the next two pages.

**Summary Chart - Survey "A" Responses**



**Figure 4-7. Rates of Response for the Five Major Categories of Agreement/Disagreement for Survey "A" by Term Defined**

**Summary Chart - Survey "B" Responses**



**Figure 4-8. Rates of Response for the Five Major Categories of Agreement/Disagreement for Survey "B" by Term Defined**

The balance of this chapter contains analyses of the data gathered from Surveys A and B. For each term, the proposed synthesized definition included in the applicable survey is presented, followed by a graph and a brief discussion of salient comments from the respondents. The graphs show how many respondents marked each category on the scale with two exceptions: (1) the number who elected to leave the scale unmarked, and (2) the number who annotated their survey to indicate that they were "Unfamiliar with Term."

The total number of surveys returned for Survey A was 97, however from 5 to 8 CPCMs left their response to any given term blank. Of these, four individuals returned the entire survey unmarked, except for notes to indicate that they were either ill, retired, had just had a death in the family or were just too busy to take the time necessary to participate. For Survey B, 88 responded and between 8 and 14 CPCMs left their survey responses to any given term blank. Three of the surveys returned by Survey B respondents were entirely unmarked. We were unable to determine whether the remaining omissions were deliberate or accidental from the information provided, thus they were omitted from the total of responses used to determine the overall rate of consensus, which is also called the rate of agreement or the rate of approval in the text to lend a little variety to what is essentially a very "dry" topic, for each word. This percentage, is calculated by dividing the sum of "Strongly Agree" and "Agree" responses by the total number of responses (excluding those which were "Unmarked" and those responses which were marked "Unfamiliar with Term," as set forth in Chapter III.C.2.e).(4). *Change in Calculation*). The graphical representation of the data gathered shows the number of responses (columns) and the corresponding percentages (line and dot) for the ranges called out by the associated Likert Scale.

Since the survey guaranteed anonymity to the respondents (although many respondents chose to sign their survey forms and the accompanying comments), direct quotations taken from the surveys do not cite a source. A brief analysis of the aggregated quantifiable data gathered, with pertinent comments supplied by survey respondents and any further research needed to

determine the validity of the comments, sets forth the researchers' rationale for modifications necessary to arrive at a final proposed definition for a particular term.

In conclusion, the final proposed definition, modified to incorporate any changes deemed appropriate as a result of the researchers' analysis, is presented. The final proposed definitions for the terms surveyed are also set forth separately in Appendices F.1 and F.2.

#### **D. Overall Comments**

Examples of salient overall comments include:

- Majority of terms are used in major systems acquisition or weapons programs and may not be familiar in other areas of acquisition.
- All of your definitions are oriented toward defense -- If it is your goal to define only for DoD, then I think you should state so. Otherwise, understand there is non-DoD contracting that occurs & try to define more generically.
- Some awareness of the connotation of context in which a term will be used/discussed will enhance communication.

These comments are well taken. The scope of the thesis effort is limited to analysis of selected acquisition related terms (identified in detail and discussed in Chapters II and IV hereof) in terms of their current usages and/or definitions found in published literature on relevant topics. Where possible the researchers have identified the context in which particularly defense-oriented terms are used. Inasmuch as the original synthesized definitions were based on review of reasonably available contracting literature, including regulations, journals and instructional materials, as well as texts, existing glossaries and dictionaries, they were felt to be representative of the current definitions of these terms in existing literature. They were consistent among the various sources reviewed. However, time constraints did not allow the researchers to review all literature or publications, therefore the day-to-day definitions elicited from the surveys were welcome adjuncts. They were invaluable in determining whether published definitions are indeed consistent with operational definitions currently in use.

## E. Interpretation of Survey "A" Results

### 1. Agency-Peculiar Property

Government-owned personal property that is peculiar to the mission of one agency, including end items and integral components of military weapons systems along with related peculiar support equipment, but excluding government material, special test equipment, special tooling and facilities. Agency peculiar equipment may be provided to a contractor as government-furnished property (GFP) for use in contract performance when it is necessary (1) for use as a standard or model, (2) for testing the contractor's end item where suitable commercial equipment is not available, (3) to establish equipment compatibility, or (4) for other reasons that the contracting officer determines to be in the Government's interest.

Synonym: Agency Peculiar Property, Related Support Equipment, Peculiar Support Equipment.

Antonym: Common Support Equipment; Common Item(s).

Analysis of survey responses yielded the following results:

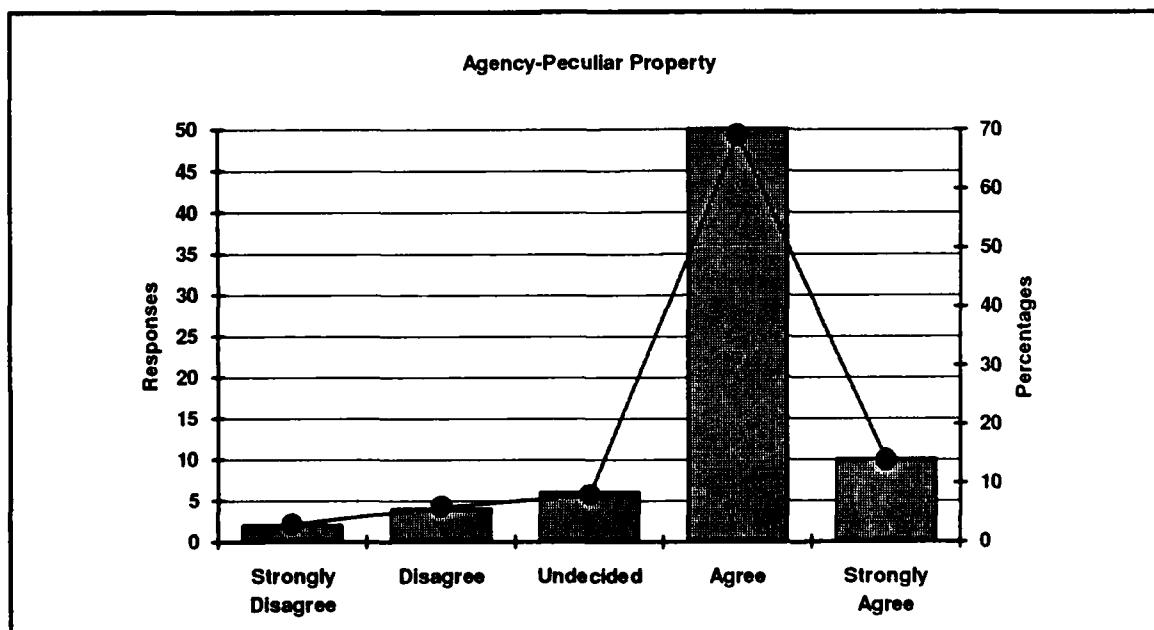


Figure 4-9. Agency-Peculiar Property Survey Results

It seems that a number of people object to this term in general, primarily on the basis of use of the word "peculiar." One commented, "Never did like 'peculiar.' Try 'Agency-Distinctive Property'." Others suggested the use of "Agency Owned Property" and another commented,

"Dislike the term "peculiar"; has pejorative meaning of "odd." Agency Specific Property is better." However, based on the responses received, the commonly used term, AGENCY- PECULIAR PROPERTY, was familiar to over 80% of the total number of respondents. A total of 83% of those who marked other than the category, "Unfamiliar with Term," chose either "Agree" or "Strongly Agree." The use of the word "peculiar" is supported at FAR 46.203(c)(1) and (2), which indicates ". . . a critical [or non-critical] item may be either "peculiar," meaning it has only one application, or "common," meaning it has multiple applications. Therefore the term was allowed to stand with no change.

Several individuals also commented on the use of the words "personal property" suggesting that it be changed to "tangible property" to make the meaning clearer, however FAR Part 45, Nash & Schooner, and Keyes, all use the former phraseology, so it too has remained unchanged.

Two people, one of whom indicated unfamiliarity with the term, also objected to the second sentence which was included to clarify some basic uses of AGENCY-PECULIAR PROPERTY. One said, "The remainder of the definition is not a definition, but explains one use of the property you are attempting to define." The other stated, "Use of the equipment goes beyond definition and should not be a part of the definition. Use may vary by agency and may be changed at times." The researchers felt that the inclusion of an example would aid in the reader's understanding of the use of the term in Government contracting, particularly in view of the fact that this is a direct quotation from the DFARS.

Those who were not familiar with DFARS 245.301 objected to the military bias displayed by use of the phrase, ". . .including end items and integral components of military weapons systems. . ." They wanted to see a more general definition, that could be applied to the peculiar property of any Government agency. The literature review does not fully support such a generalized definition. However, inclusion of the words "as used in the Department of Defense (DoD)" as part of the definition should clarify any confusion.

None of the proposed antonyms were questioned. One person tendered "Contractor Owned Property" as an additional antonym. Suggested Synonyms included: "Military Property," "Space Property," "DoD Military Property," "NASA Space Hardware" and "Government Furnished End Item." Three people took issue with the synonyms "Related Support Equipment" and "Peculiar Support Equipment" as being generic to any type of property. Since "AGENCY-PECULIAR PROPERTY and related support equipment" is a commonly used term in various DoD publications and regulations, "Related Support Equipment" has been deleted as an synonym for this term.

The final proposed definition, intended to accommodate the intent of the parties who provided supportable suggestions, follows:

### **Agency-Peculiar Property**

- In general, Government-owned personal property that is peculiar to the mission of one agency.
- As used in the Department of Defense (DoD), this term includes end items and integral components of *military weapons systems* along with related peculiar support equipment, but excludes government material, special test equipment, special tooling and facilities. Such items may be provided to a contractor as government-furnished property (GFP) for use in contract performance when it is necessary
  - (1) for use as a standard or model,
  - (2) for testing the contractor's end item where suitable commercial equipment is not available,
  - (3) to establish equipment compatibility, or
  - (4) for other reasons that the contracting officer determines to be in the Government's interest.

Synonyms: Peculiar Support Equipment, Military Property, Space Property, Government Furnished End Item(s).

Antonyms: Common Support Equipment; Common Item(s), Contractor Owned Property.

## 2. Architect-Engineering (A-E) Contract

A two-phased, government contract for professional architect-engineer (A-E) services, subject to, (1) special source selection procedures required by the Brooks Act, and (2) a statutory limitation on total compensation--or "fee."

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

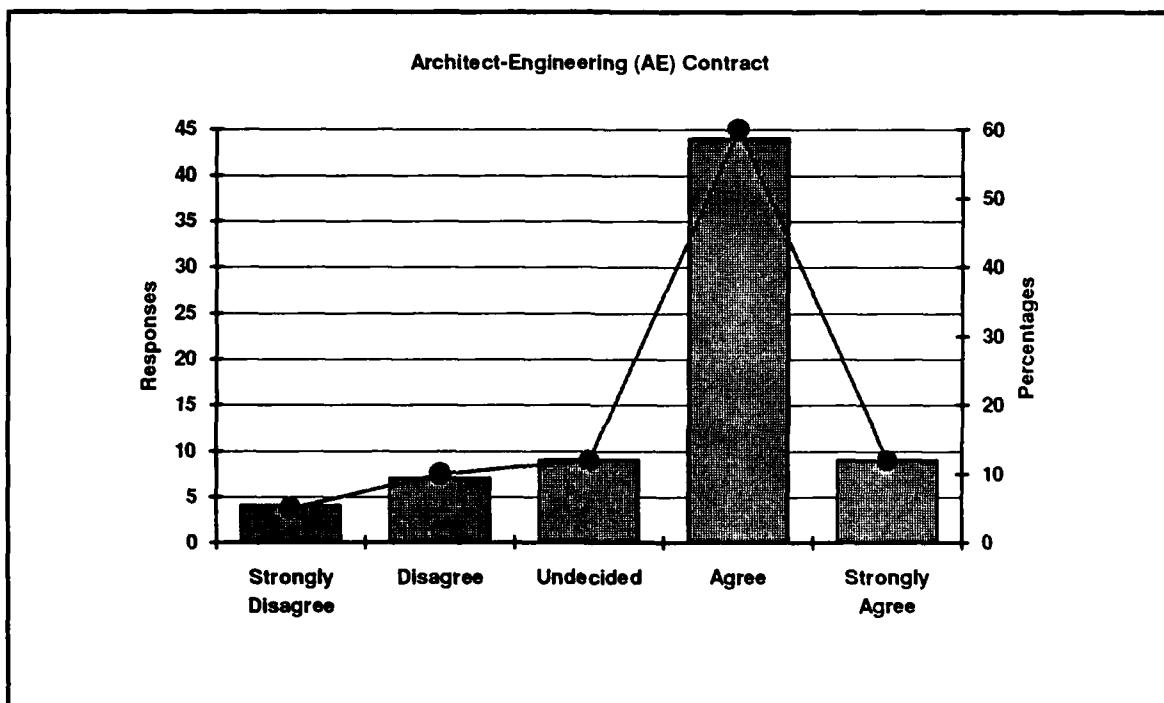


Figure 4-10. Architect-Engineer (A-E) Contract Survey Results

Approximately 19% of the respondents indicated they were unfamiliar with this term and nearly 8% left it unmarked for various reasons. A total of 73% of the remainder marked either "Agree" or "Strongly Agree," the lowest approval rating in Survey A.

Over half of those who provided comments indicated their primary area of concern was that readers might become confused by the position of the phrase "two-phased" in the definition. This is considered valid. It is not the contract that is two-phased. "Two-phased" actually refers to statutory source selection procedures which mandate specialized technical selection with non-

competitive cost and price negotiations. Several respondents also wanted more clarification of what A-E Services are. One suggested "Design Engineering Services Contract" as a synonym. This appears to be reasonably descriptive of an A-E CONTRACT. The final proposed definition has been rephrased to address these issues.

Another area of concern was quantification of the statutory limitation on total compensation or fee. The researchers purposely left out the exact percentage of the limitation because this type of data is subject to change from time to time and thus could render the definition less meaningful to future readers.

The final proposed definition, an amalgamation of the original synthesized definition and comments of the respondents designed to address the major concerns, is:

### **Architect-Engineering (A-E) Contract**

A contract for professional services of an architectural or engineering nature associated with research, planning, development, design and/or construction, alteration or repair of real property or other services incidental thereto. In the Government, these contracts are subject to (1) special, statutory, two-phased selection and negotiating procedures based on rank order of technical qualifications, and (2) a statutory limitation on total compensation or "fee."

Synonyms: Design Engineering Services Contract.

Antonyms: None.

### **3. Co-development**

An international collaboration to which more than one government contributes efforts or resources during the development phase of a major weapon system program.

Synonyms: Collaborative Development, Compensatory Trade Agreement, Cooperative Development, Cooperative Research and Development Program with One or More Allied Nations, Joint Project, Joint Venture.

Antonyms: Joint-Service Development, Service-Unique Development, Agency-Peculiar Development.

Analysis of survey responses yielded the following results:

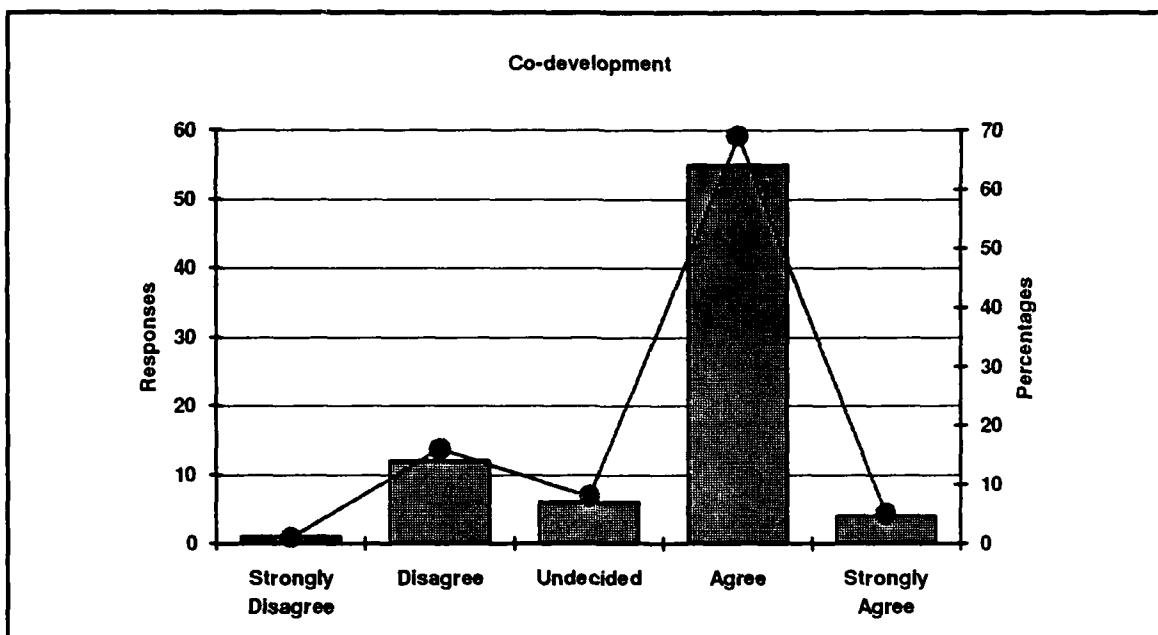


Figure 4-11. Co-Development Survey Results

The overall rate of agreement was 74% for the term CO-DEVELOPMENT. However, nearly 75% of the 23 individuals who provided comments on this definition objected to the use of the word "international" since they were more familiar with the commercial aspects of cooperative development among domestic companies or corporations than similar efforts between governments. The literature review did not support the commercial application of this term, however, common sense points to the probability of its usage among parties who are engaged in research and development on a domestic rather than an international level. The *American Heritage Dictionary* indicates the prefix "co-" means, "1. With; together; joint; jointly. . . 2.a. Partner or associate in an activity. . ." (3:284). In this sense, CO-DEVELOPMENT would refer to "joint development regardless of the identity of the parties" as pointed out by one of the respondents. Some of the comments are listed below:

- Commercial contractors also enter into co-development agreements.
- CO-DEVELOPMENT, as such, does not have to be international. It may be between Government and the private sector as well.

- CO-DEVELOPMENT should not be reserved for international partnerships.
- CO-DEVELOPMENT is a generic term that you have applied your DoD bias to. Why not define International Military Co-Development?
- In the commercial industry, CO-DEVELOPMENT is accomplished frequently between two (2) commercial firms, not necessarily international, but also domestic. I recommend the use of "international" in word.
- Agree, however, the term is not descriptive enough and, when used in conversation, is not limited to foreign Government as other party.

Several comments indicated that some of the proposed synonyms ("Joint Project" and "Joint Venture") and/or antonyms ("Joint-Service Development, Service-Unique Development, Agency-Peculiar Development") were not necessarily applicable to the definition as originally presented. As a result, the questioned items were deleted from the definition, as were "Compensatory Trade Agreement" and "Cooperative Research and Development Program with One or More Allied Nations." The last two were removed to make the definition more generic.

Based on the above, the proposed final definition is:

### **Co-development**

1. Joint project(s) or venture(s) entered into by agreement between two or more parties to develop or build a new product or to develop new capabilities or uses for an existing product.
2. Often used in the Department of Defense to denote an international collaboration to which more than one government contributes efforts or resources during the development phase of a major weapon system program.

Synonyms: Cooperative Development, Collaborative Development.

Antonyms: None.

#### 4. Concept Exploration

The period, known as "Phase 0," at the beginning of a weapon system's life cycle, generally limited by time and budget, during which comprehensive system studies and experimental hardware efforts are accomplished to evaluate and define the feasibility of alternative concepts and provide the basis for assessing their relative merits at the Milestone I decision point.

Synonyms: Concept Exploration Phase, Concept Exploration/Definition Phase, Phase 0.

Antonyms: None.

Analysis of survey responses yielded the following results:

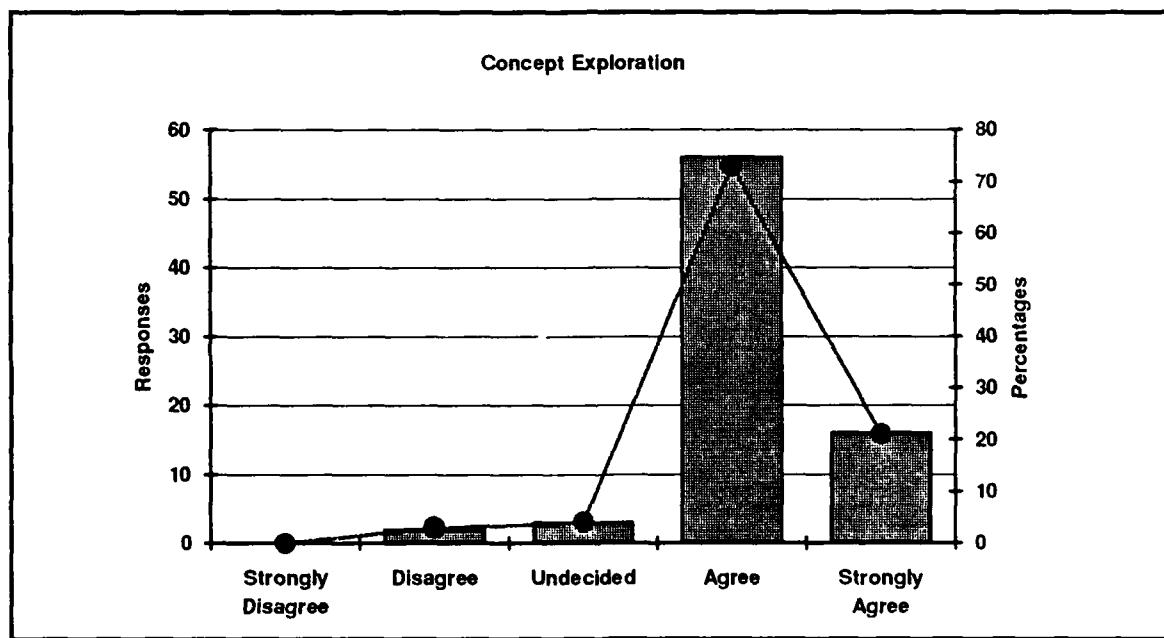


Figure 4-12. Concept Exploration Survey Results

This definition elicited a 94% rate of agreement, excluding those who left the Likert Scale blank (5) and those who indicated they were not familiar with the term (15). Exceptions taken to the definition were related to:

- the fact that this term can also be defined in a generic process-related manner as well as in the context of a period in a weapon system's life cycle,
- the phrase, "generally limited by time and budget," since this is true throughout the life cycle of nearly all weapon system programs, and

- the phrase, "experimental hardware efforts," since, in the respondents' experience, such efforts were the exception rather than the rule.

Review of these comments (and of the sources used to synthesize the definition surveyed) resulted in addition of a generic process-related definition of CONCEPT EXPLORATION and in deletion of the objectionable phrase, "generally limited by time and budget" from the period-related definition. Further, the phase designator, "Phase 0" has been retained only as a synonym, since such names, titles, or designators are subject to change on occasion. The same comment about changing titles is true about "Milestone I" which has been changed to the "first milestone." Since both the *Glossary* and AFM 11-1 include the phrase, "experimental hardware efforts," it remains as part of the definition modified by the adverb, "possibly". The final proposed definition, revised to reflect consistency with operational usage, appears below:

### **Concept Exploration**

1. The process of refining a proposed concept and reducing the concept's technical uncertainties.

Synonyms: None.

Antonyms: None.

2. In the Department of Defense, the period at the beginning of a weapon system's life cycle, during which comprehensive system studies and, possibly, experimental hardware efforts are accomplished. Used to evaluate and define the feasibility of alternative concepts and provide the basis for assessing their relative merits at the first milestone decision point.

Synonyms: Concept Exploration Phase, Concept Exploration/Definition Phase, Phase 0.

Antonyms: None.

### **5. Consent to Subcontract**

- The contracting officer's written consent for the prime contractor to enter into a particular subcontract when the subcontract work contemplated is complex, the dollar value is substantial, or the Government's interest is not adequately protected by competition and the type of prime contract or subcontract.

Synonyms: Advance Notification, Consent Requirement, Contractor Purchasing System Review.

Antonyms: None.

Analysis of survey responses yielded the following results:

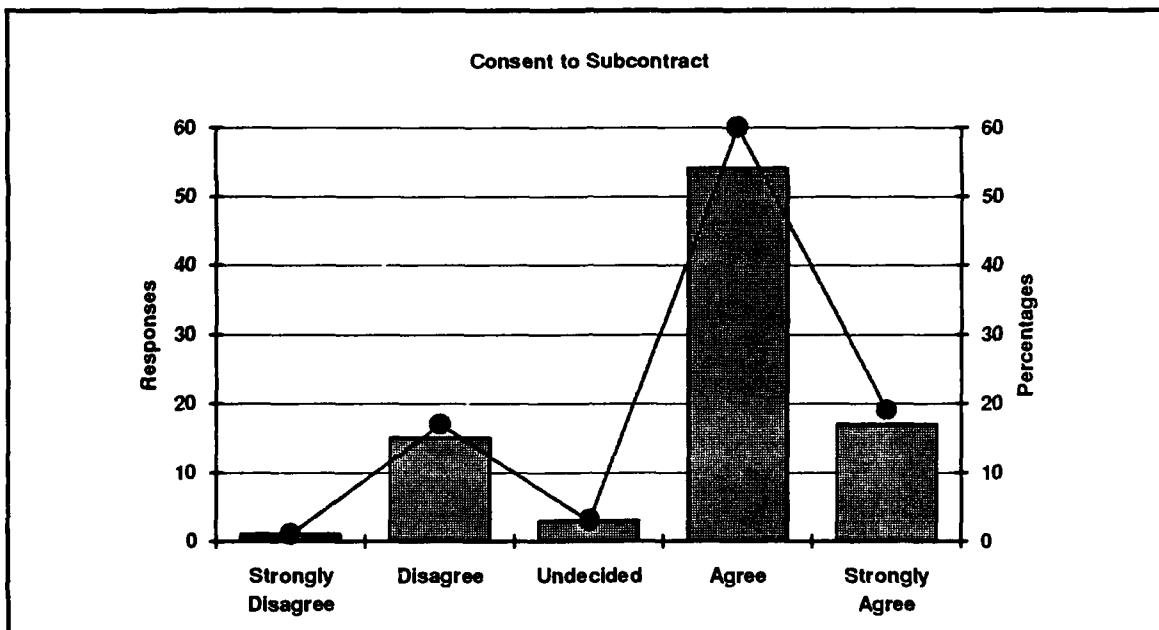


Figure 4-13. Consent to Subcontract Survey Results

Although this definition received a respectable 79% rate of agreement, with only one individual indicating unfamiliarity with the term, 34 people took the time to comment on various aspects of the definition, including one who said, "I agree with the definition, but not the concept" and another who stated, "Definition is accurate, however concept is outdated and conflicts with [Integrated Product Development] IPD & [Total Quality Management] TQM policies."

Several respondents were concerned about how to quantify the words "complex," "substantial," and "adequately." Since the synthesized definition relied heavily on FAR 44.101 and .102, and these particular words were taken verbatim from these passages, they will remain in the final proposed definition.

The main objections cited in the comments were to the proposed synonyms. The operational meanings of these terms were different enough to render them inapplicable to this definition. As a result, the questioned synonyms were deleted.

The proposed final definition follows:

### **Consent to Subcontract**

The contracting officer's written consent for the prime contractor to enter into a particular subcontract when (1) the subcontract work contemplated is complex, (2) the dollar value is substantial, or (3) the Government's interest is not adequately protected by competition and the type of prime contract or subcontract.

Synonyms: None.

Antonyms: None.

### **6. Contract Advisory and Assistance Services (CAAS)**

Services, other than those specifically excluded or exempted that will support or improve agency policy development, decision making, management, and administration, or support or improve the operation of management systems. Such services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance.

Synonyms: Advisory and Assistance Services, Contractor Advisory and Assistance Services, Contracted Advisory and Assistance Services, Contract Advice and Assistance Services.

Antonyms: None.

Analysis of survey responses yielded the following results:

A total of 23 individuals of the 97 who responded to the survey indicated they were unfamiliar with this term and 7 left the Likert Scale blank. The overall rate of agreement among the remaining respondents for this definition was 85%.

Two people did not like the acronym, CAAS, because it is likely to be confused with Cost Accounting Standards (CAS) if taken out of context. Since CAAS is the common acronym for this term, the researchers left it as is.

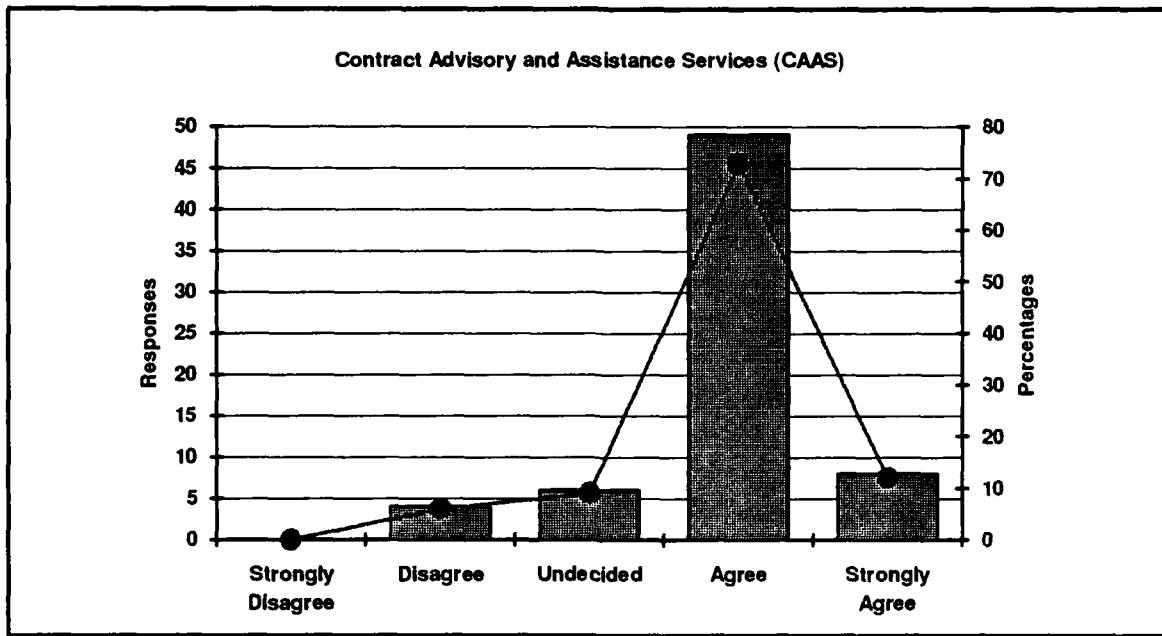


Figure 4-14. Contract Advisory and Assistance Services (CAAS) Survey Results

Three wanted a specific reference to who or what "excludes or exempts" this type of services. Rather than giving specific references, the researchers added "by statute, regulation or policy" since this type of information is subject to change at any time.

Two indicated that CAAS itself "may be inapplicable in the near future, due to re-examination of the term" by DoD and OFPP, respectively, thus this definition may be outmoded by the time it is published. Shortly prior to final publication of the NCMA dictionary that is expected to result from the combined efforts of all the researchers on this project, the authors of this thesis suggest that the term, "CONTRACT ADVISORY AND ASSISTANCE SERVICES (CAAS)," be examined one more time to see if it is still in use.

Based on the above comments the final proposed definition is set forth below:

## **Contract Advisory and Assistance Services (CAAS)**

Services, other than those specifically excluded or exempted by statute, regulation or policy, that will support or improve agency policy development, decision making, management, and administration, or support or improve the operation of management systems. Such services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance.

Synonyms:   **Advisory and Assistance Services, Contractor Advisory and Assistance Services, Contracted Advisory and Assistance Services, Contract Advice and Assistance Services.**

Antonyms:   None.

## **7. Cost/Schedule Control Systems Criteria (C/SCSC)**

A set of 35 criteria used as minimum standards to evaluate the effectiveness of a contractor's internal policies, procedures and methods with regard to cost and schedule control of a government contract. The C/SCSC do not specifically require any data to be reported to the government, but they do provide for access needed to evaluate the system and monitor its operation during the life of the contract. C/SCSC are required in selected cost type Major Defense Acquisition Program (MDAP) contracts and typically flow down to major MDAP subcontractors.

Synonyms:   None.

Antonyms:   None.

Analysis of survey responses yielded the following results:

This definition received a consensus rating of 86% from the 87 respondents who marked the Likert Scale with other than "Unfamiliar with Term." One individual did not mark the survey sheet, but showed his/her extreme displeasure with the whole concept of COST/SCHEDULE CONTROL SYSTEMS CRITERIA (C/SCSC) by commenting, "This is micromanagement of contractors by the Government and is a good example of how the Government's paranoid obsession with oversight drives up costs."

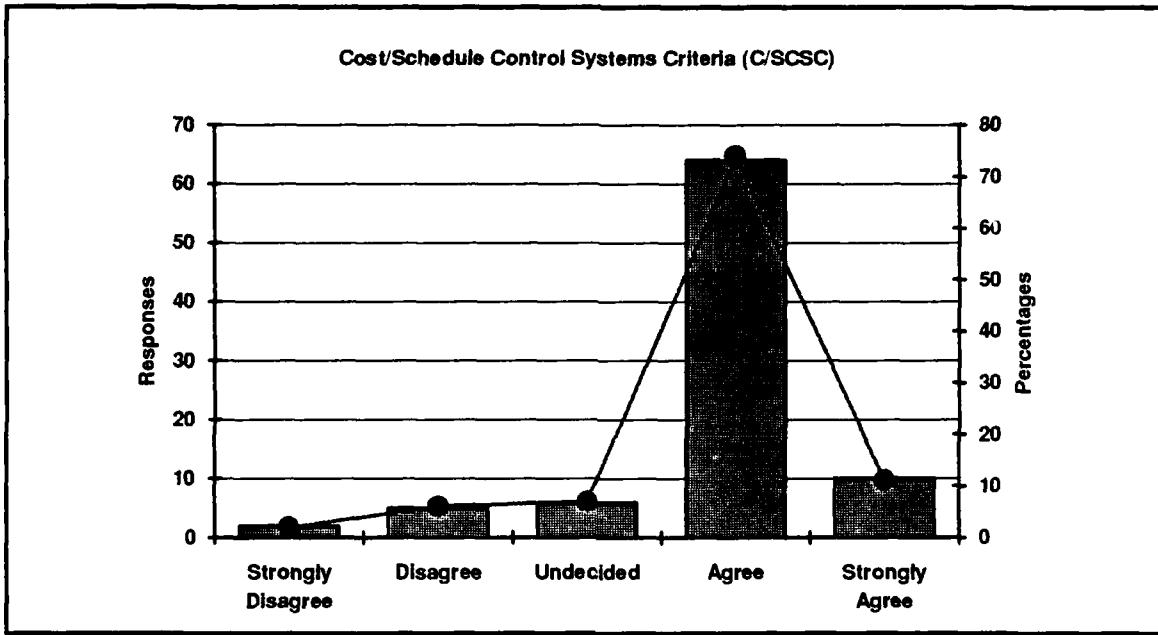


Figure 4-15. Cost/Schedule Control Systems Criteria (C/SCSC) Survey Results

Several people were concerned about use of the number "35" to describe how many criteria make up the C/SCSC, since these are subject to change as time goes by. This is a valid issue, therefore the specific number has been deleted from the definition. A few individuals wanted to see specific dollar thresholds spelled out, but since such thresholds are subject to even more rapid change than the number of criteria and are also subject to differing policy constraints in among various agencies, the final version will not reference specific numbers.

Finally, three of the CPCMs noted

- although the C/SCSC "do not specifically require any data to be reported to the government. . . all contracts requiring C/SCSC have a [Contract Data Requirements List] CDRL reporting requirement"
- C/SCSC provides a framework, not just "access," and
- No explicit external reporting requirements, but reporting required per CDRL requirement for CPR or C/SSR.

As a result of the above comments, the final proposed definition has been revised as follows:

## **Cost/Schedule Control Systems Criteria (C/SCSC)**

A set of criteria used as minimum standards to evaluate the effectiveness of a contractor's internal policies, procedures and methods with regard to cost and schedule control of a government contract. The C/SCSC do not specifically require any data to be reported to the government, but they do provide for access needed to evaluate the systems and monitor their operation during the life of the contract. Specific data requirements are found on associated Contract Data Requirements Lists (CDRLs). In the Department of Defense, C/SCSC are required in selected cost type Major Defense Acquisition Program (MDAP) contracts and typically flow down to major subcontractors.

Synonyms: None.

Antonyms: None.

## **8. Demonstration and Validation**

The second period in the acquisition cycle of a weapon system, known as Phase I, during which major program characteristics are refined through extensive study and analysis, hardware development, test and evaluation (including, where warranted, multiple design approaches and parallel technologies). The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into full scale development (FSD). The term is applicable to both Program Element Officer (PEO) Programs and Designated Acquisition Commander (DAC) contract actions.

Synonyms: Concept Demonstration/Validation, Demonstration/Validation, Demonstration and Validation Phase, Phase I.

Antonyms: None.

Analysis of survey responses yielded the following results:

The level of agreement for the term DEMONSTRATION AND VALIDATION was calculated at 93%, using the methodology outlined in Chapter III. Seven individuals failed to mark their evaluation of this term on the Likert Scale and ten indicated they were unfamiliar with the term.

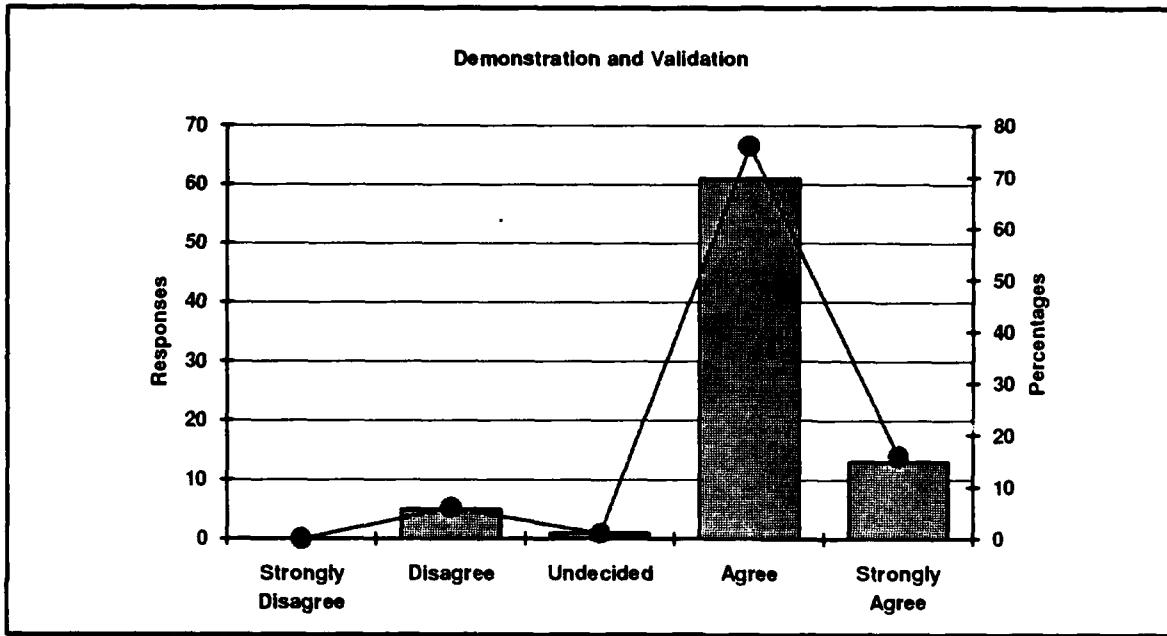


Figure 4-16. Demonstration and Validation Survey Results

The main objection voiced was related to using a phase designator, i.e., "Phase I," as part of the definition of the different periods in a weapon systems life cycle. Since it is true that names, titles or designators are changed from time to time, the reference to Phase I is being retained only as a synonym. Several respondents felt that the last sentence was superfluous for the same reason and, upon reflection, it has been deleted.

Three CPCMs questioned use of the phrase, "validate the choice of alternatives. . ." However, these words were taken directly from DoDI 5000.2, Part 3.d., the researchers felt it was appropriate to leave them in final proposed definition.

One person pointed out, accurately, that the term Full Scale Development (FSD), which is also known as Full Scale Engineering Development (FSED), has been superseded by the term Engineering & Manufacturing Development (EMD). This has been corrected in the revised final proposed definition. However, since both FSD and FSED are still in use by many acquisition professionals, they are annotated as "former titles" for clarity.

The final proposed definition for the term DEMONSTRATION AND VALIDATION follows:

## **Demonstration and Validation**

The second period in the acquisition cycle of a weapon system, during which major program characteristics are refined through extensive study and analysis, hardware development, test and evaluation (including, where warranted, multiple design approaches and parallel technologies). The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into Engineering and Manufacturing Development (EMD) (formerly titled Full Scale Development (FSD) or Full Scale Engineering Development (FSED)).

Synonyms: Concept Demonstration/Validation, Demonstration/Validation, Demonstration and Validation Phase, Phase I.

Antonyms: None.

## **9. Design/Technical Competition**

A phrase sometimes used to denote competition for ideas and technologies in the early developmental stages of a major weapon system life cycle leading to a stable system design. Early competitive exploration of alternatives in the form of *competitive system design concepts* is encouraged in order to foster innovation and conceptual competition from industry. Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk.

Synonyms: Alternative System Design Concepts, Competition for Ideas and Technologies, Competitive Alternative Development and Production, Competitive Parallel Short-term Studies, Competitive Prototyping, Competitive System Design Concepts, Multiple Design Approaches and Parallel Technologies.

Antonyms: Single System Design Concept, Sole Source Design/Technology, Use of "proprietary" or "noncompetitive" in relation to translating the user's needs into alternative concepts and a stable system design.

Analysis of survey responses yielded the following results:

In spite of the lack of extensive literary source material for the definition of the specific term DESIGN/TECHNICAL COMPETITION, only eleven individuals indicated they were unfamiliar with the concept and six left the response blank. Sufficient information was available in OMB

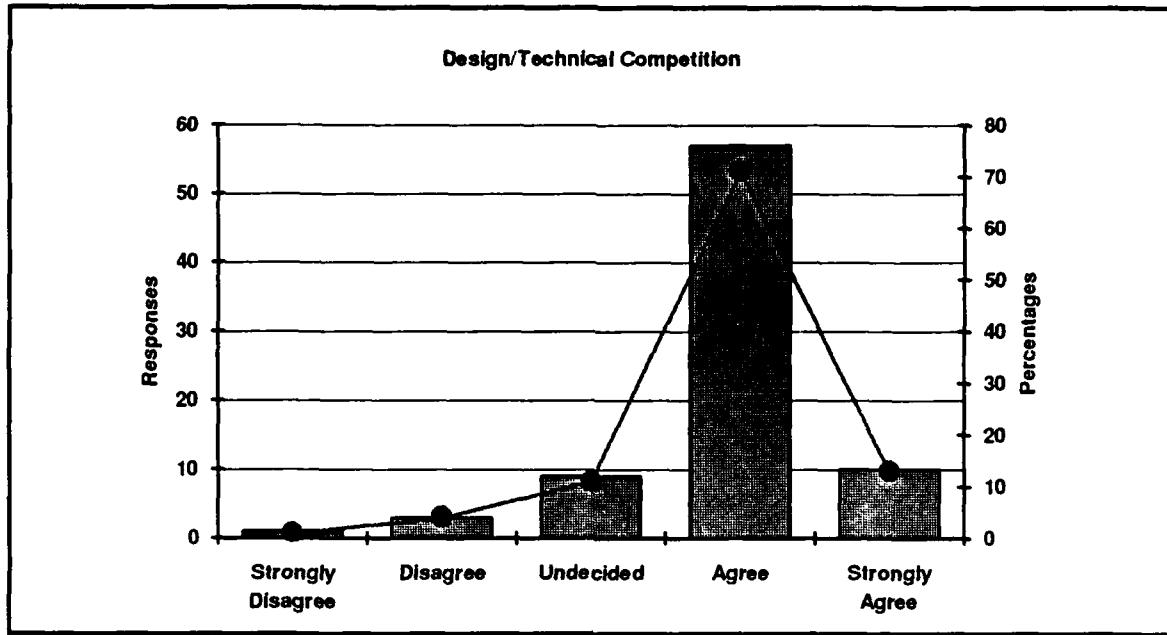


Figure 4-17. Design/Technical Competition Survey Results

A-109, DoDD 5000.1 and DoDI 5000.2 to propose a synthesized definition adequate to reach an overall level of consensus of 86%, calculated using the methodology outlined in Chapter III.

A number of respondents noted that this term could also be employed in describing the competitive aspects of a Step 1 "Request for Technical Proposals" which initiates the "Two-Step" Sealed Bid procurement process. One pointed out that we seemed to be "limiting this term and its use to weapon systems. It could also mean one part of a competition in which each proposed/prospective contractor submits a proposal to address this area and submits information required by an RFP to meet the stated selection criteria." The researchers felt these were valid concerns about an operational use of the term DESIGN/TECHNICAL COMPETITION that were previously overlooked. As a result, an alternate definition to include this usage, has been added.

Several people did not like the last antonym listed, "Use of "proprietary" or "noncompetitive" in relation to translating the user's needs into alternative concepts and a stable system design." Since this is a rather wordy and awkward sentence that adds little to the definition, it has been dropped.

The final proposed definition, incorporating these changes appears below:

## **Design/Technical Competition**

1. A term denoting competition for ideas and technologies in the early developmental stages of a major weapon system life cycle leading to a stable system design. Early competitive exploration of alternatives in the form of *competitive system design concepts* is encouraged in order to foster innovation and conceptual competition from industry. Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk

Synonyms: Alternative System Design Concepts, Competition for Ideas and Technologies, Competitive Alternative Development and Production, Competitive Parallel Short-term Studies, Competitive Prototyping, Competitive System Design Concepts, Multiple Design Approaches and Parallel Technologies.

Antonyms: Single System Design Concept, Sole Source Design/Technology.

2. A term employed to describe the competitive aspects of a "Request for Technical Proposal," in Step 1 of a "Two-Step" Sealed Bid procurement.

Synonyms: None.

Antonyms: None.

## **10. Documentation**

Recorded technical data or special knowledge or concepts:

- *General* - from which information can be derived. Examples: technical reports, a page containing data, a graphical or pictorial representation; a tape recording, a book, or a film record; packing lists, historical records; and diagrams of electrical and hydraulic systems and utility connections.
- *Computer Software* - including computer listings and printouts, that (1) documents the design or details of computer software, (2) explains the capabilities of the software, (3) provides data for testing the software, or (4) provides operating instructions.
- *Configuration Management* - established when the applicable configuration baseline is established, including both current and historical information to ensure traceability from the initial baseline.

- *Contractual* - maintained in a contract file which supports the acquisition action being taken or evidences compliance with statutes, regulations and policies. Examples: Price Negotiation Memorandum (PNM); Purchase Request (PR); Acquisition Strategy; and Acquisition Plan; and files maintained for historical support until a contract is closed out.
- *Financial and Accounting* - provided or maintained in support of financial and property transactions. Examples: summary and backup data to support a cost estimate; files maintained for historical support until a contract is closed out; accounting and voucher payment documents; documents to be reviewed by the Inspector General (IG); and rates of change required in PNMs.
- *Legal* - written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for the purpose. Examples: contracts; contract files; accounting records; and other documents of an evidentiary nature.
- *Management* - used in managing and reviewing a program. Required documents will vary for each review based on subject matter, program maturity; and, operational and developmental issues outstanding. Examples: Mission Needs Statement (MNS); Operational Requirements Document (ORD); and Acquisition Program Baseline (APB).
- *Policies and Procedures* - recorded or maintained to evidence compliance with applicable policies and procedures. Examples: a justification of weightings in the Source Selection Plan (SSP) or Price Negotiation Memorandum (PNM); a document justifying the exercise of an option or any limitation on an option price; and a determination of responsibility or nonresponsibility.
- *Technical Data* - for the purposes of allocating the rights of the contracting parties to the information.

Synonyms: Support, Evidence.

Antonyms: None.

Analysis of survey responses yielded the following results:

Although this is by far the longest definition synthesized in this thesis, it garnered a respectable consensus rating of 76%. Eleven people objected to its length and complexity. They felt that a generic "dictionary" definition no longer than three or four lines long was sufficient.

This attitude was summed up by one comment which read,

I am not sure, but what you are headed down too complex path by trying to define in knowledge categories. How about a much simpler definition--no more than 4 lines--dealing with providing evidence of work performed and a data base support) for technical knowledge or concepts. Too much detail here.

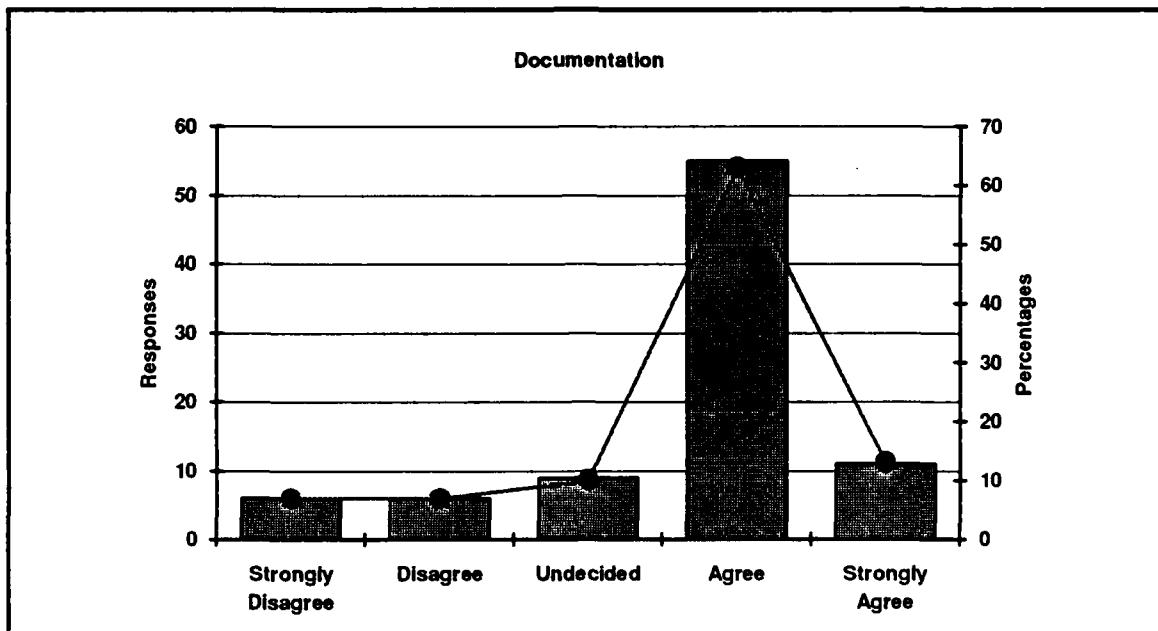


Figure 4-18. Documentation Survey Results

The researchers disagree with this point. Because there are so many types of DOCUMENTATION used in the field of Government acquisition, they felt it necessary to include some of the more common types as part of the definition. However to satisfy those who wanted to see what "Webster" said, the first part of the definition has been revised to include a combination of Webster's definition and the definition taken from the American Heritage Dictionary (68:540; 3:414).

There also appeared to be some perplexity about whether or not the examples were meant to be all-inclusive. To alleviate this concern, the phrase, "includes, but is not limited to" or words to that effect were added as qualifiers where appropriate.

The way the synthesized definition was structured confused some respondents. They felt that using the phrase, "Recorded technical data or special knowledge or concepts" as the introduction only, made the categorical definitions easy to read out of context. Therefore, this phrase was added into the types of documentation listed rather than just listing it once at the beginning.

The single sub-definition that caused the most heartburn was the one for "Technical Documentation." The respondents offered no concrete suggestions as to how it should be modified to make it clearer. The researchers were unable to clarify it fully in the time remaining to complete the thesis. Therefore, this part of the definition is being deleted with the recommendation that future researchers on this subject matter look into finding a better way of defining this term.

The researchers suggest that the definition be broken down into its component parts when it is published, if it becomes obvious that the definition, taken as a whole, is too much for the ordinary reader to assimilate at one time.

The final proposed definition, incorporating the above changes, is shown below:

## **Documentation**

- The act or an instance of the supplying of documents or supporting references or records.
- The documents or references supplied.
- The collation, synopsizing and coding of printed material for future reference.
- The orderly presentation, organization and communication of recorded special knowledge to produce a historical record of changes in variables.

The multi-faceted nature of this term is illustrated below. It includes, but is not limited to, the following types of documentation, commonly used in Government contracting:

1. General Documentation - Recorded technical data or special knowledge or concepts, in any form, from which information can be derived. Examples include, but are not limited to: technical reports, a page containing data, a graphical or pictorial representation; a tape recording, a book, or a film record; packing lists, historical records; and diagrams of electrical and hydraulic systems and utility connections.
2. Computer Software Documentation - Recorded technical data or special knowledge or concepts including, but not limited to, computer listings and printouts, that (1) document the design or details of computer software, (2) explain the capabilities of the software, (3) provide data for testing the software, or (4) provide operating instructions. Such documentation must be in human-readable form (as distinguished from machine-readable).
3. Configuration Management Documentation - Recorded technical data or special knowledge or concepts established when the applicable configuration baseline is established, including both current and historical information to ensure traceability from the initial baseline to the latest configuration.

4. *Contractual Documentation* - Recorded technical data or special knowledge or concepts maintained in a contract file which supports the acquisition action being taken or evidences compliance with statutes, regulations and policies. Examples include, but are not limited to, such documents as: Price Negotiation Memoranda (PNM); Purchase Requests (PR); Acquisition Strategies; and Acquisition Plans; or files maintained for historical support until a contract is closed out.
5. *Financial and Accounting Documentation* - Recorded technical data or special knowledge or concepts provided or maintained in support of financial and property transactions. Examples include, but are not limited to, general ledger entries, summary and backup data to support cost estimates; files maintained for historical support until a contract is closed out; accounting and voucher payment documents; documents to be reviewed by the Inspector General (IG); and rates of change required in Price Negotiation Memoranda (PNMs).
6. *Legal Documentation* - Recorded technical data or special knowledge or concepts including, but not limited to, written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for a legal purpose. Examples: contracts; contract files; accounting records; and other documents of an evidentiary nature.
7. *Management Documentation* - Recorded technical data or special knowledge or concepts used in managing and reviewing a program. Required documents will vary for each review, based on subject matter, program maturity; and, operational and developmental issues outstanding. Examples include, but are not limited to, Mission Needs Statement (MNS); Operational Requirements Document (ORD); and Acquisition Program Baseline (APB).
8. *Policies and Procedures Documentation* - Recorded technical data or special knowledge or concepts, maintained to enforce and/or evidence compliance with applicable policies and procedures. Examples include, but are not limited to, information supporting the justification of weightings in a Source Selection Plan (SSP) or Price Negotiation Memorandum (PNM); a document justifying the exercise of an option or any limitation on an option price; or a determination of responsibility or nonresponsibility.

Synonyms: Support, Evidence.

Antonyms: None.

## 11. Economic Production Rate (EPR)

The most economically feasible rate at which an end item can be manufactured.

Synonyms: Economic Production Quantity.

Antonyms: Accelerated Production Rate.

Analysis of survey responses yielded the following results:

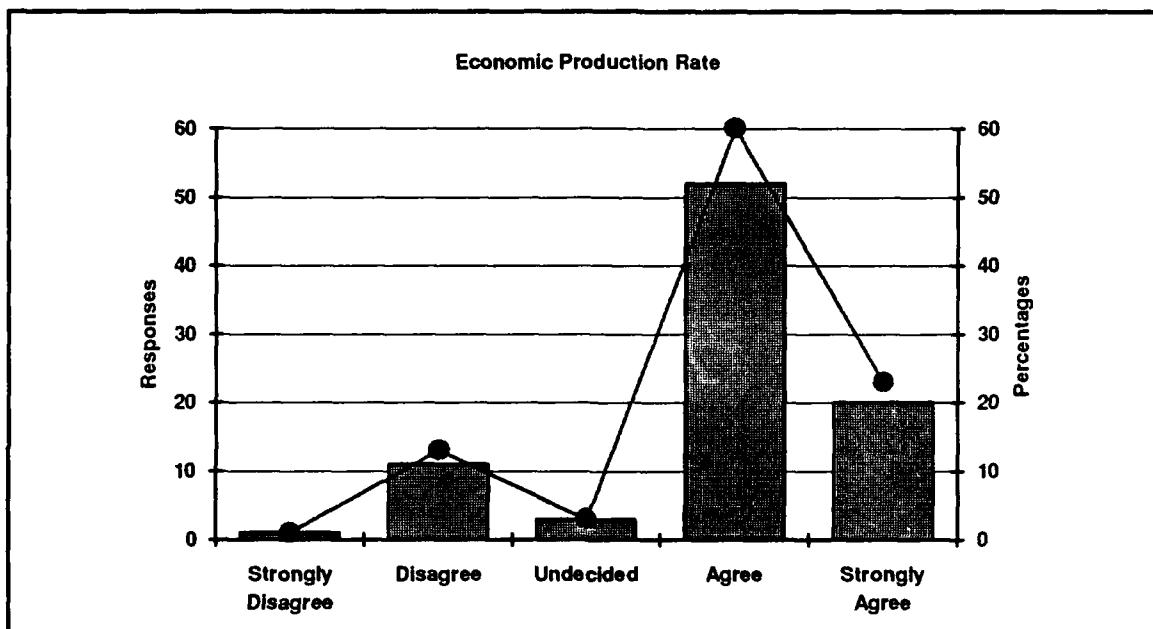


Figure 4-19. Economic Production Rate Survey Results

This definition, by far the shortest in Survey A, elicited twenty-two comments about such topics as optimality, feasibility, and equilibrium, as well as two illustrations of the effects of supply and demand on economic production activity. It achieved a consensus rate of 83%, calculated as discussed above, but not without a great deal of input from individuals on both sides of the Likert Scale. One declared, "Strongly Agree: Good, simple, easy to understand definition!" while another remarked, "Strongly Disagree: A good start but needs to be beefed up."

Other respondents were more concerned about use of the phrase "the most economically feasible. . ." They took this to mean that the definition was for the "optimal production rate," rather than the ECONOMIC PRODUCTION RATE and a number just plain didn't like the word

feasible. Several resolved their reservations about this particular phrase by simply moving it to the end of the definition.

A few took issue with the proposed synonyms and antonyms with comments such as, "Accelerated production rate is not necessarily opposite of an economic production rate," and the five who questioned the difference between "rate" and "quantity" said words to the effect that, "Quantity and rate are not interchangeable." All of the synonyms and antonyms, both questioned and proposed, had to do with either quantity or rate, i.e., "Economic Order Quantity," "Economic Production Lot" and "Minimum Production Rate." The researchers were unable to resolve the absolute differences among the terms to everyone's satisfaction, therefore, neither synonyms nor antonyms are part of the final proposed definition, which has been revised to incorporate the intent of the input received, as set forth below:

### **Economic Production Rate (EPR)**

The rate at which a quantity of end items can be manufactured most economically. Usually measured in terms of the most efficient quantity for a production run given the capacity of the manufacturer.

Synonyms: None.

Antonyms: None.

### **12. Economic Purchase Quantity (EPQ)**

That quantity of an item, identified by offerors, at which a significant price break occurs. It is one of many data points used by inventory managers in establishing and evaluating economic order quantities for supplies under their cognizance.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

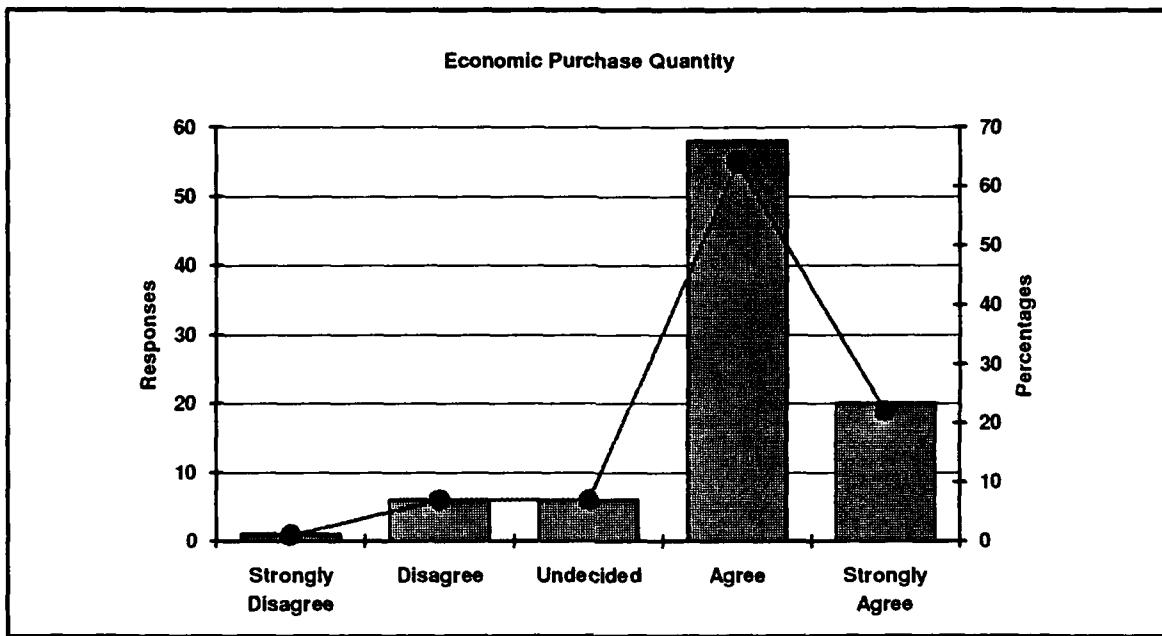


Figure 4-20. Economic Purchase Quantity Survey Results

The synthesized definition for this term achieved an 86% consensus rate, as calculated in accordance with the methodology detailed in Chapter III and Appendix A. One respondent noted that "the EPQ is not necessarily a single data point since it is not necessarily just one quantity" and drew a step diagram to illustrate the point. Another pointed out that, "EPQ may also involve "packaging" a group of items to achieve a price benefit." These comments were helpful in making this definition a little clearer.

Other comments received were primarily editorial in nature. However, two general threads among the comments received, which were useful in broadening the definition, were that,

- the first sentence implies that only inventory managers make this type of decision , and
- "under their cognizance" at the end of the second sentence is superfluous.

"Economic Order Quantity" was suggested as a synonym for ECONOMIC PURCHASE QUANTITY, however, the literature reviewed in compiling information for Chapter II, indicated they are related but not synonymous terms. Therefore, this suggestion was ignored. The term, "Quantity Discount," was also suggested and accepted for inclusion as a synonym.

After careful consideration of these comments, the synthesized definition has been modified to read as follows in its final proposed form:

### **Economic Purchase Quantity (EPQ)**

That quantity (or range of quantities) of an item, identified by an offeror, at which a significant price break occurs. It is one of many considerations used by those responsible for establishing and evaluating economic order quantities for supplies.

Synonyms: Quantity Discount.

Antonyms: None.

### **13. Educational Service Agreement (ESA)**

An ordering agreement, not a contract, under which the Government may order educational services.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

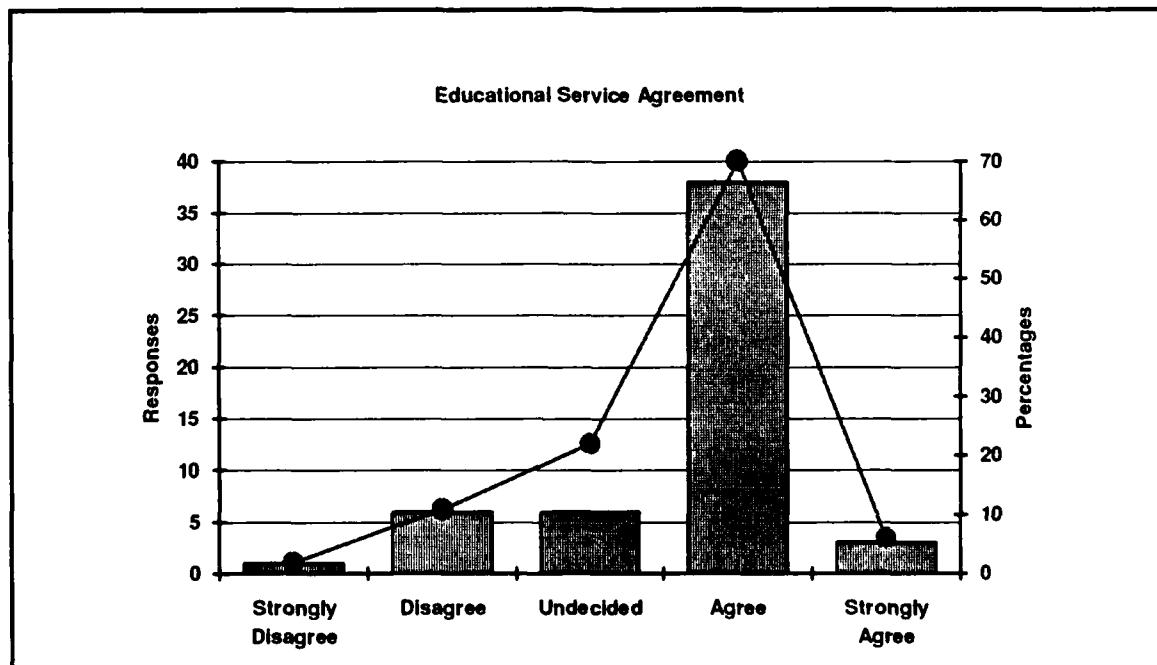


Figure 4-21. Educational Service Agreement Survey Results

The definition of this term achieved a consensus rate of 76%. It is noted that only 54 people out of the 97 voiced an opinion. Six failed to mark it at all and 37 indicated they were unfamiliar with the term. The common theme among those who disagreed was confusion about the meaning of the word "agreement" as opposed to the word "contract." Their comments included:

- Why isn't this considered a contract?
- Term "not a contract" is superfluous and misleading. Better take it out rather than explain when and when not orders under the agreement become contracts.
- An "agreement" is an agreement--Why have this special term--ESA?
- I don't see the distinction between Agreement and Contract.
- Disagree with "not a contract." If there is an agreement between the parties, then it should be reduced to writing as a contract.

These comments also indicate unfamiliarity with use of the term in the Department of Defense. DFARS 237.7201(a) clearly states, "An educational service agreement is not a contract, but is an ordering agreement under which the Government may order educational services. . ." DFARS 237.7203(a) tells us that Educational Service Agreements are issued "for an indefinite duration and remain in effect until terminated" and DFARS 237.7204 sets out the mandatory format and specific clauses to be used in procuring such services. The researchers feel that the synthesized definition clearly states exactly what it was intended to convey.

- that an ESA is a type of ordering agreement,
- that it is not a contract, *per se*; and,
- that it is used by the Government to obtain educational services.

This is the essence of the term. We recognize that it could have been expanded to include such things as who is eligible, how long they last, how they are funded, etc., but these are things that are subject to change. Therefore, no change will be made to the synthesized definition as a result of respondents' comments. The final proposed definition is as follows.

## **Educational Service Agreement (ESA)**

An ordering agreement, not a contract, under which the Government may order educational services.

Synonyms: None.

Antonyms: None.

## **14. Excess Reprocurement Costs**

Any excess costs incurred by the government to repurchase supplies or services similar to those terminated for default.

Synonyms: Excess Costs of Reprocurement, Defaulted Contractor's Liability for Excess Costs.

Antonyms: None.

Analysis of survey responses yielded the following results:

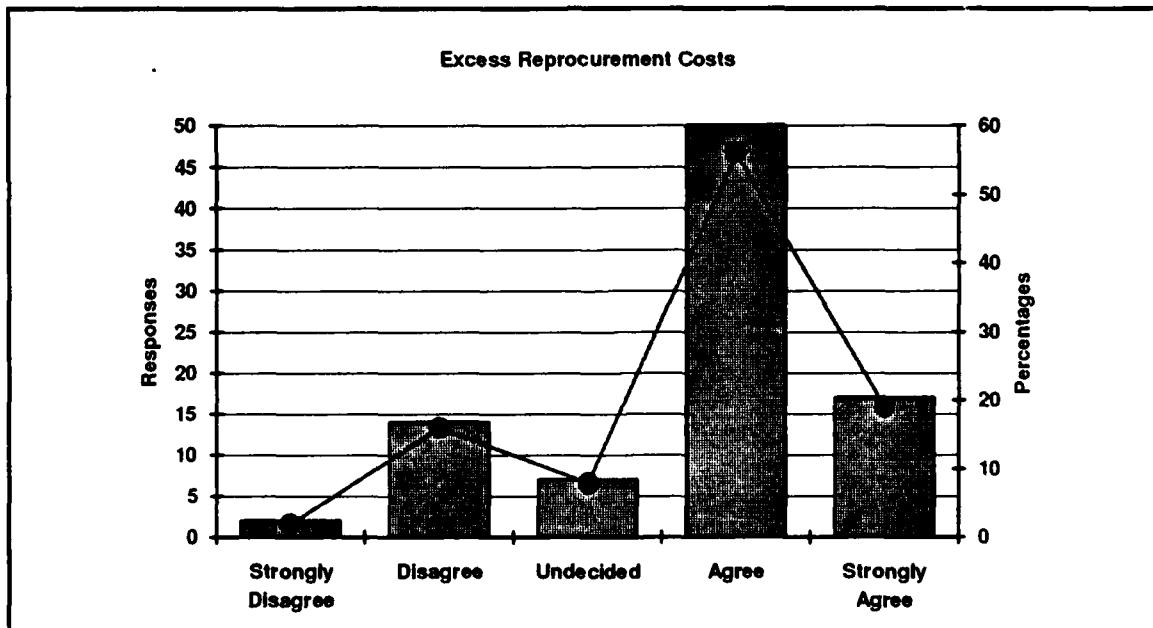


Figure 4-22. Educational Service Agreement Survey Results

The definition of this term received a consensus rating of 75%. None of the respondents indicated they were unfamiliar with the term, however 30 of them took the time to comment on it and request that more clarification be incorporated in the synthesized definition. Their comments,

which were quite helpful, and a review of additional source material resulted in what the researchers believe to be a more easily understood definition.

Most objections were related to the words "any" and "excess" as used in the definition. Representative comments included:

- "Any" - This is too broad a term. It would be very nice to ID what costs can be included under the heading.
- The word "any" opens doors for a variety of costs which may or may not be defined as reprocurement costs.
- "Excess" is superfluous.
- Disagree with "any." Also "excess" is not defined.
- Excess would need to be expanded to define costs above and beyond the price/cost of the action terminated. This is not an obvious point.
- Excess cost may include higher prices and administrative costs associated with the reprocurement action.
- I believe it's only the direct cost of the reprocured item which exceeds the cost of the defaulted items. It doesn't include the Government's cost to reprocure.

These types of remarks led the researchers to believe that there is some confusion about the proper application of this term, even among the experts. In discussing the definition of "excess" in the above context, Robert J. Wehrle-Einhorn, in *Government Contract Law*, states,

The "excess costs" assessed against the contractor are generally the difference between the original contract price and the repurchase price. Other related costs are also recoverable; the defaulting contractor becomes liable for whatever reasonable damages were caused by the default. (69:18-3)

As a result of these and other similar comments, the phrase "any excess costs" has been expanded to read, "The difference between the original contract price and the cost to repurchase . . ." and a line that reads, "Includes other related costs and reasonable damages incurred by the government," has been added..

The remaining area that respondents indicated was unclear was use of the phrase "similar to" as in "supplies or services similar to those terminated for default." Comments included:

- Supplies must be "equivalent to," not similar."
- Don't like the phrase, "similar to those terminated for default" - What is similar? "supplies or services"? or "excess costs"?
- Thought supplies or services had to be the same, not similar.

According to Wehrle-Einhorn,

Conditions generally imposed upon repurchase action are: (1) repurchase must be made within a reasonable time after termination; repurchased items must [be] the same or be as similar as practicable to the defaulted items in quality, units and specifications; and (3) repurchase contract terms should be essentially the same as the original contract terms. (69:18-3)

The final proposed definition has been modified to reflect the respondents' input and the thrust of Wehrle-Einhorn's discussion of EXCESS REPROCUREMENT COSTS, as set forth below.

### **Excess Reprocurement Costs**

The difference between the original contract price and the cost to repurchase supplies or services that are the same as, or as similar as practicable to, those terminated for default. Includes other related costs and reasonable damages incurred by the purchaser.

Synonyms: Excess Costs of Reprocurement, Defaulted Contractor's Liability for Excess Costs, Cost of Cover.

Antonyms: None.

### **15. Fair and Equitable**

A term used to denote impartiality and reasonableness in the exercise of business judgment by government contracting officers in the performance of their official duties with regard to contractors.

Synonyms: Fair and Reasonable.

Antonyms: None.

Analysis of survey responses yielded the following results:

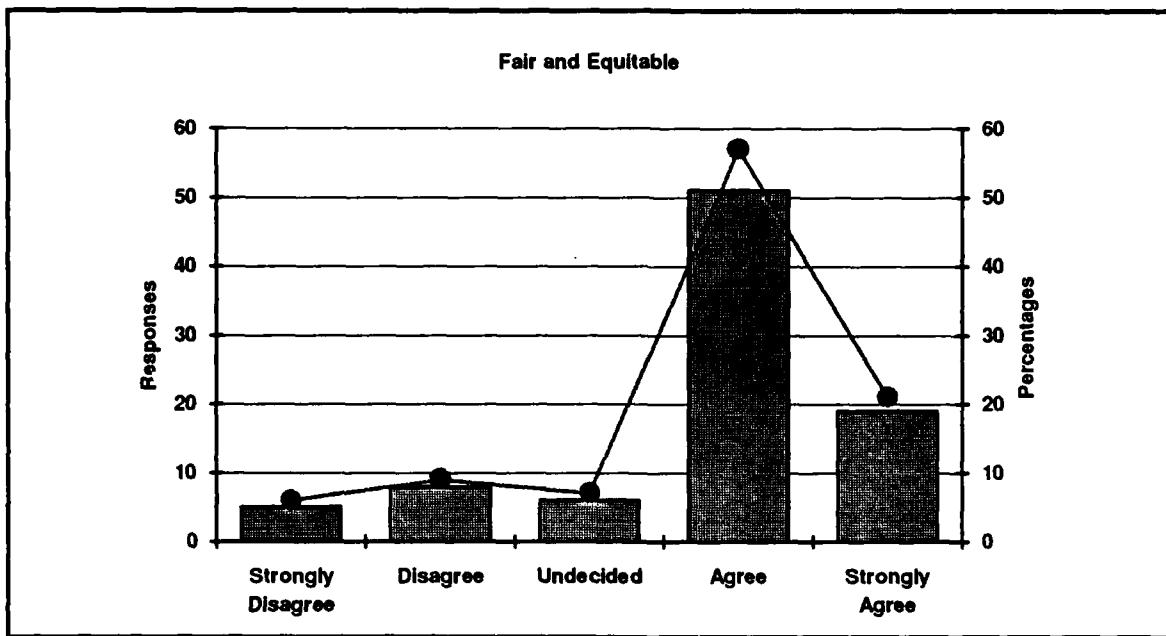


Figure 4-23. Fair and Equitable Survey Results

The rate of agreement for this definition was 79%, a surprisingly high number considering the nebulous nature of the term being defined. The biggest criticism was the implication that the use of FAIR AND EQUITABLE is applicable only to the contracting officer. Comments to that effect included:

- Not limited to "government contracting officers"
- But is this term limited to C.O.s? What about evaluators in source selection? or those who conduct in-plant reviews?
- Can be attributed to all acquisition personnel.
- "Fair and equitable" is not (or should not be) restricted to CO's business judgment. F&E also refers to terms, pricing, *inter alia*.
- Focus on Government detracts from overall concept.
- Government Contracting Officers are agents of the Government, and therefore cannot be impartial. Fair & equitable is usually viewed differently from each side of the table.

The point is well taken. Obviously, the concepts of "fairness" and "equity," which one respondent labeled "legal/philosophical constructs" are not categorically limited. Many of the

respondents from the commercial sector bristled at the implication that, somehow, others are excluded from their exercise. However, it is clear from reading FAR 1.602-2(b) and AFFARS 5349.305(a) that one of a contracting officer's primary responsibilities is to, "Ensure that contractors receive impartial, FAIR AND EQUITABLE treatment. . ." The contracting officer has not only the right to determine what is fair and equitable with regard to a particular contractual circumstance, but also the responsibility to carry it out impartially, i.e., in a way that is free of favoritism or bias. Based on the above, the definition has been reworded to reflect that the scope of this particular definition is limited to the government contracting arena and a separate generic definition has been added.

There appears to be some disagreement among the survey population as to the true meaning of the component words (see the discussion in Chapter II of the literature review) in this definition as well as in the term itself. Some of the comments are listed below:

- "Impartial" does not mean "fair"
- Impartiality connotes a human trait that few people can ever totally achieve. Should not the old term "fairness" be employed instead.
- Reasonableness is a different concept from fair and equitable.
- Term is "Fair and Reasonable" not "Fair and Equitable."
- Reasonable is not a synonym for "Equitable"

The literature review discussed the dictionary definitions of the words *fair*, *equity* and *equitable*. According to The American Heritage Dictionary, *fair* means "free of favoritism or bias; impartial: a fair judge. . .;" *equity* means, "the state, ideal or quality of being just, impartial and fair;" and *equitable* means "exhibiting or characterized by equity; impartial or reasonable in judgment or treatment" (3:462, 486). As a result, the words "impartiality and reasonableness" have not been amended.

The final proposed definition is set forth below.

## Fair and Equitable

- Exhibiting or characterized by impartiality; reasonableness and freedom from favoritism or bias in judgment or treatment.
- In government contracting, a term used to denote impartiality and reasonableness in the exercise of business judgment by contracting officers in the performance of their official duties.

Synonyms: None.

Antonyms: None.

## 16. Fair and Reasonable Price

A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance and also considering any applicable statutory, regulatory, or judgmental limitations.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

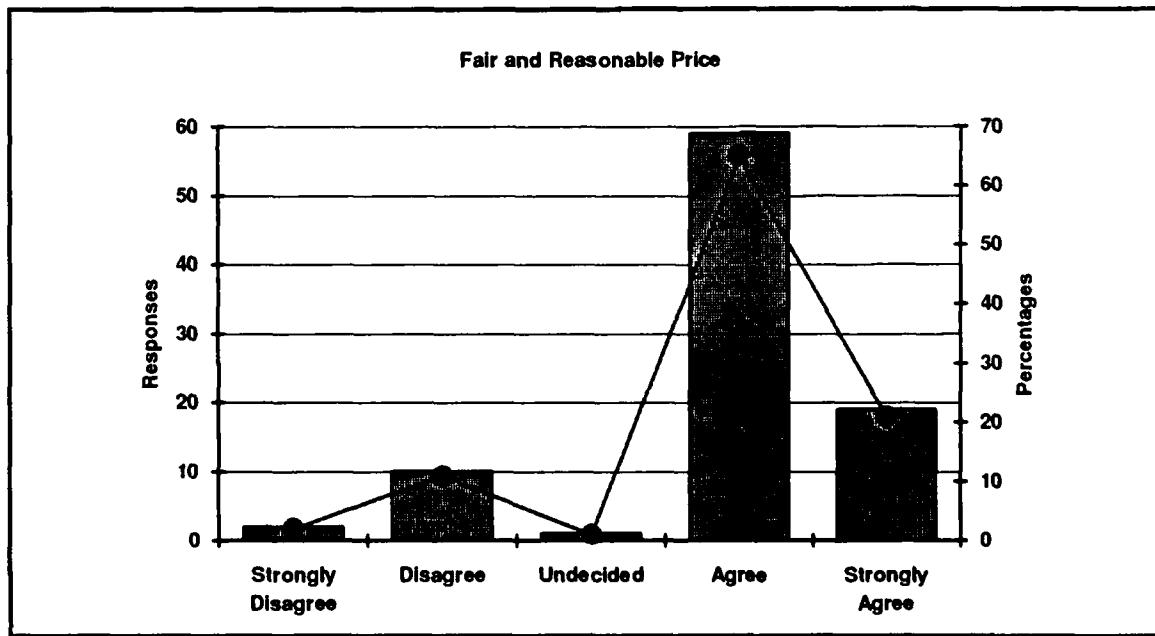


Figure 4-24. Fair and Reasonable Price Survey Results

The synthesized definition of FAIR AND REASONABLE PRICE received a consensus rating of 86%, calculated as set forth in Chapter III. All respondents who marked the Likert Scale expressed familiarity with the term. The researchers expected a high level of recognition and of agreement on this definition, inasmuch as it is taken almost verbatim from the *ASPM No. 1*, (16:2B10 and 17:B-5) which is also used directly in three other published works on Government contracting, the *Reference Book* (48:168), the *Desktop Guide* (51:27), and *Contract Management: Post Award* (60:436-437).

There were some philosophical differences of opinion about the definition such as that voiced by the respondent who marked "Strongly Disagree" and said, "I would like to see some reference made to "prevailing economic market conditions" in this definition in order to give just due to the overall notion of our free enterprise system in the U.S." Another wanted definitions of each of the component words included in the definition. (S)he asked, ". . .What is reasonable? Compared to what? This is a statement which strongly requires a definition. This is not it." This respondent also circled the word "fair" in the definition as well as "or judgmental limitations" and wrote, "What does this mean? How about unique capabilities?"

The researchers consider the requested level of definition, identified above, beyond the scope of this thesis effort. Chapter II.B., "Scope," clearly cautions, ". . .the object of this effort is not to define each word in each phrase or term individually, inasmuch as the researchers believe readers of this type of publication already have a vested interest in and are knowledgeable about the majority of contracting and acquisition related terminology or jargon in use today." The words identified as needing additional attention are common words found in any major dictionary. Therefore, no changes were made to the definition and it stands as originally synthesized.

### **Fair and Reasonable Price**

A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance and also considering any applicable statutory, regulatory, or judgmental limitations.

Synonyms: None.

Antonyms: None.

## 17. Full Scale Engineering Development

- The third period, known as "Phase 2," in a weapon system's life cycle, during which the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output includes a preproduction system that closely approximates the final product, the design documentation necessary to enter the production phase and the integrated logistics support documentation necessary to field and fully support the system, as well as test results that demonstrate that the production will meet stated requirements. Effective risk management is critical throughout this phase.

Synonyms: Full Scale Development, Engineering and Manufacturing Development, Phase 2.

Antonyms: None.

- For Research & Development contracting, there is a distinction between "engineering development" and "operational development" as to the status of projects with regard to their approval to proceed into production and the availability of production funding in the applicable DoD budget submission. All items in this area are major line item projects which appear as RDT&E costs of weapons systems elements in other programs. Program control is exercised by review of the individual projects.

Synonyms: Engineering Development, Operational Development.

Antonyms: None.

Analysis of survey responses yielded the following results:

For a term that has apparently been superseded as a result of revamping the DoD 5000 Series of regulations, this "split" synthesized definition received a surprisingly high level of consensus, 88%. Only seven people were unfamiliar with the term.

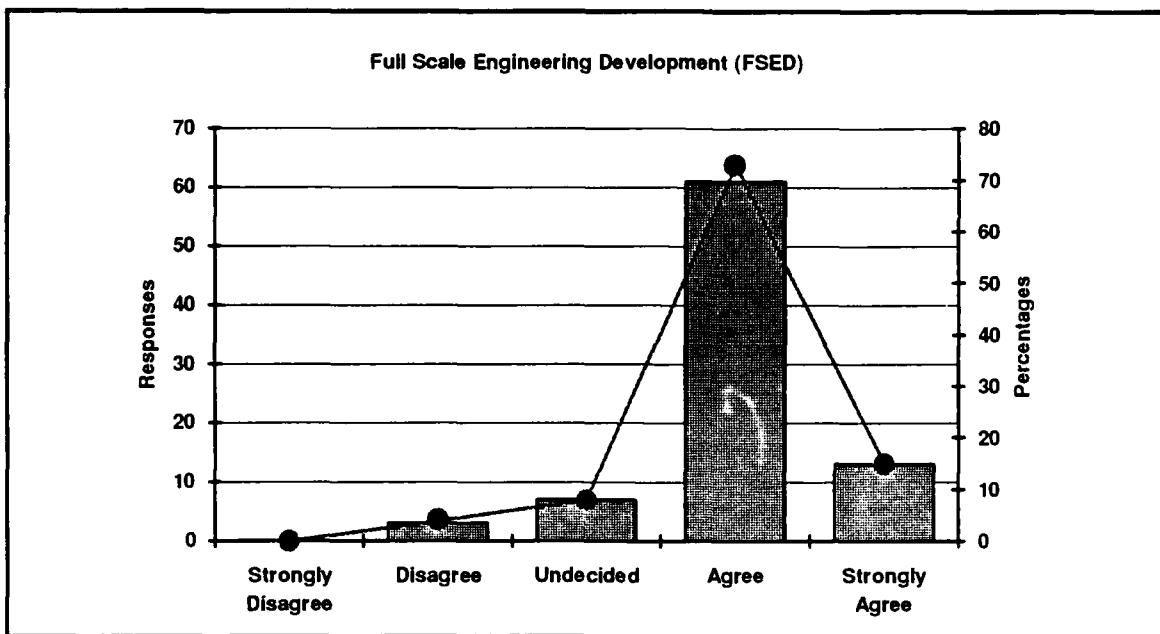


Figure 4-25. Full Scale Engineering Development (FSED) Survey Results

Upon reexamination of the literature review in conjunction with the comments received from the respondents, the researchers decided change the title (or term) of the first part of the definition from FULL-SCALE ENGINEERING DEVELOPMENT (FSED) to ENGINEERING AND MANUFACTURING DEVELOPMENT (EMD). This action will bring it into closer consonance with DoDD 5000.2, *Defense Acquisition Management Policies and Procedures*, and other related regulations. The second definition has the caveat that, for R & D Contracting, FAR 235.001 splits the term, FSED, into two subparts based on status as to approval for production and funding constraints. FULL-SCALE ENGINEERING DEVELOPMENT (FSED) will remain the title of this part of the definition, since the FAR still addresses the subject in this manner.

Several people commented that effective risk management is critical in all phases, not just FSED, or EMD, as it is now titled. They indicated the last sentence of the first definition added nothing to the definition. This criticism is considered valid, therefore, the sentence has been deleted. Further, the phase designator, "Phase 2" has been retained only as a synonym, since such names, titles, or designators are subject to change on occasion.

Based on comments about the complexity of the sentence structure in the synthesized definitions, the researchers have shortened the sentences to make them more readable. The final proposed definitions, which incorporate the changes discussed above, are:

### **Engineering and Manufacturing Development (EMD)**

The third period in a weapon system's life cycle, during which the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output includes a preproduction system that closely approximates the final product and the design documentation necessary to enter the production phase. It also includes integrated logistics support documentation necessary to field and fully support the system, as well as test results that demonstrate that the production will meet stated requirements.

Synonyms: Phase 2, (formerly known as Full Scale Development (FSD) or Full Scale Engineering Development (FSED)).

Antonyms: None.

### **Full-Scale Engineering Development (FSED)**

Pursuant to DFARS 235.001, "Research & Development (R&D) Contracting," this term is divided into two parts: "Engineering Development" and "Operational Development." These parts reflect the status of projects with regard to (1) their approval to proceed into production and (2) the availability of production funding in the applicable DoD budget submission. All items in this area are major line item projects which appear as RDT&E costs of weapons systems elements in other programs. Program control is exercised by review of the individual projects.

Synonyms: Engineering Development, Operational Development

Antonyms: None.

### **18. Government Furnished Information (GFI)**

Written knowledge, including documentation such as manuals, drawings, and test data or mapping, charting and geodesy property, which is in the possession of or directly acquired by the Government, and that is subsequently delivered or otherwise made available to the contractor.

Synonyms: Government Property, Government Furnished Property (GFP), Government Furnished Material (GFM), Government Furnished Data (GFD).

Antonyms: Contractor Acquired Property (CAP), Contractor Furnished Equipment (CFE). Contractor Inventory.

Analysis of survey responses yielded the following results:

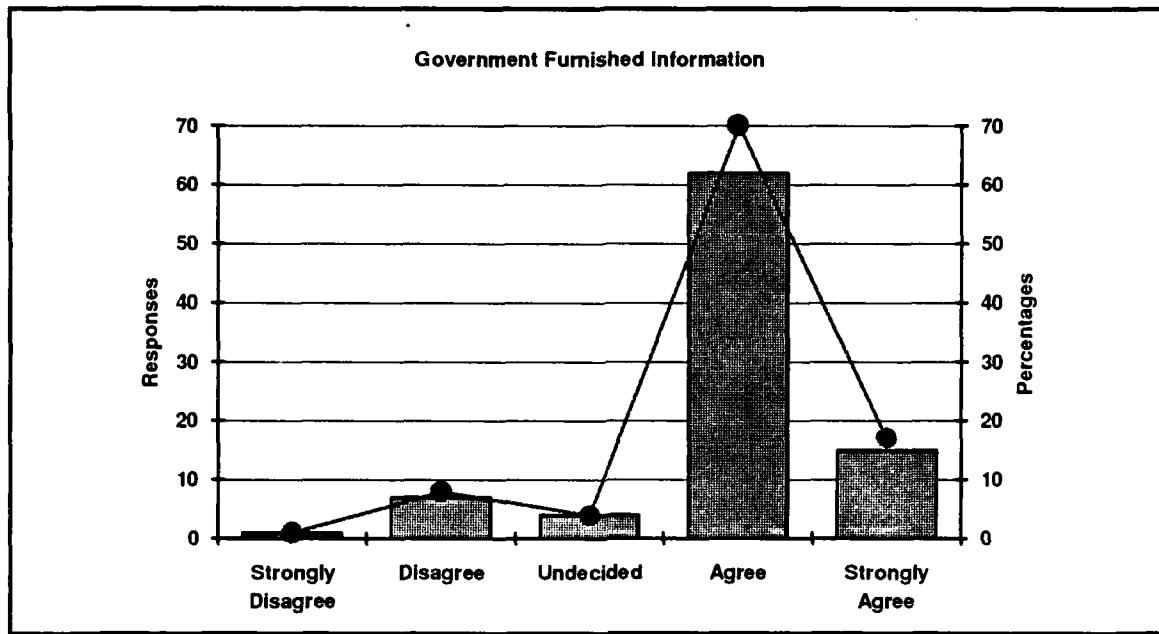


Figure 4-26. Government Furnished Information Survey Results

Eighty-seven percent (87%) of the respondents, excluding seven who failed to mark the Likert Scale and one who indicated (s)he was unfamiliar with the term, expressed agreement with the synthesized definition.

Several suggested additional types of GFI, e.g., data, disks, tapes, interface data, technical data, software documentation/code, intellectual property, and computer generated information. Software was mentioned often enough to make it a credible addition to the list of the types of information that fall in this category. Rather than to try to make an all inclusive list, the phrase, "but not limited to," was added.

A number of respondents noted that such information is furnished for use in "support of a Government activity" or "on a Government contract." This is supported by FAR 52.245-2(a), which states, "The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract. . ." The definition has been amended to reflect this condition.

Three people took exception to the use of "Government Furnished Property (GFP)" as a synonym. Actually, GFI is a subset of GFP and GFP is included in the broad term Government Property (48:205). As such, the higher level terms can be used to describe the lower level, but not the reverse. Since only 3% of the total respondents made this point, the synonyms have remained the same.

The final proposed definition, incorporating the above changes, is:

### **Government Furnished Information (GFI)**

Written or recorded knowledge or data, including, but not limited to, documentation such as manuals, drawings, software and test data, or mapping, charting and geodesy property. Such information is normally in the possession of or directly acquired by the Government. It is subsequently delivered or otherwise made available to a contractor for use in connection with and under the terms of a Government contract.

Synonyms: Government Property, Government Furnished Property (GFP) , Government Furnished Material (GFM), Government Furnished Data (GFD).

Antonyms: Contractor Acquired Property (CAP), Contractor Furnished Equipment (CFE), Contractor Inventory.

### **19. Greatest Value**

The most advantageous alternative to the Government, in the judgment of the contracting officer, over the system life in terms of price, cost, quality, performance, and any other relevant factors.

Synonyms: Most Advantageous Alternative.

Antonyms: Low Price Offeror.

Analysis of survey responses yielded the following results:

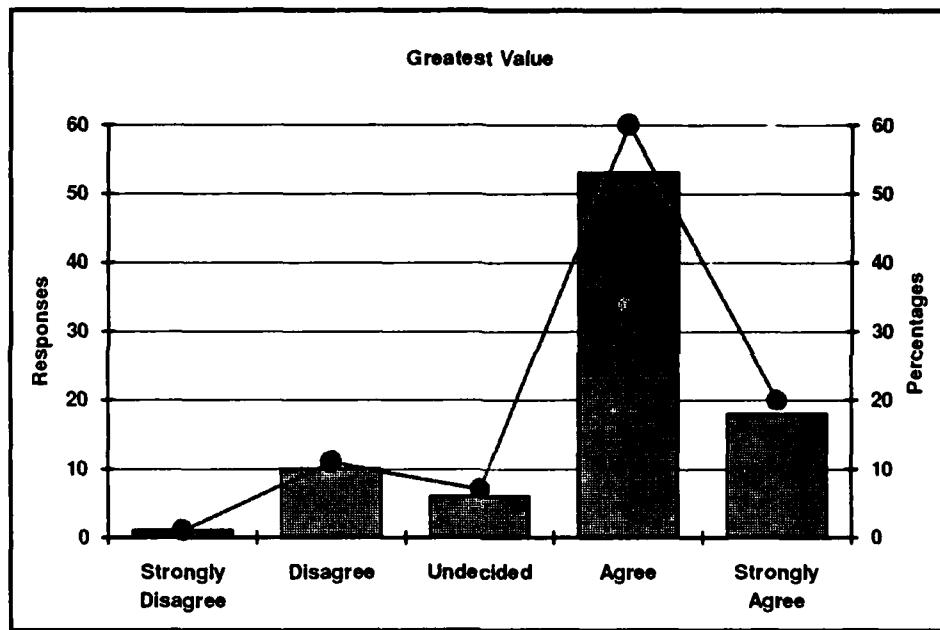


Figure 4-27. Greatest Value Survey Results

This is another of those "fuzzy terms" that can be interpreted in many ways depending on the context and the circumstances in which it is used. It garnered an overall rate of agreement at the 81% level, calculated in accordance with Chapter III.

The most frequent criticism encountered was that the term GREATEST VALUE is not needed, at least not as a separately identifiable Government contracting term. Several responses indicated that "Best Value" was adequate. The term "best value" has been added to the list of synonyms, but Greatest Value will remain in the list of terms defined as it is one of the terms listed on the Master List of contracting terms requiring definition.

Three respondents did not like the implication inherent in the phrase, "in the judgment of the contracting officer," that the contracting officer is the only individual who exercises such judgment. However, AFMC FARS 5352.215-9003(a) supports this phrase, where it says, "the contract award decision will be based on the contracting Officer's judgment as to which offer provides the GREATEST VALUE price, price related factors including required delivery schedule, complexity of items, criticality of items, size of order. . ." as does AFMC FARS 5352.215-9004,

which reiterates, ". . .and award is made to the offeror that in the contracting officer's judgment, provides the GREATEST VALUE. . ." (28:29).

The only other recurring comment was that "low price offeror" is not necessarily antonymous--that it might actually also be the best value. This makes sense, therefore, "low price offeror" is being deleted as an antonym.

### **Greatest Value**

The most advantageous alternative to the Government, in the judgment of the contracting officer, over the system life in terms of price, cost, quality, performance, and any other relevant factors.

Synonyms: Most Advantageous Alternative.

Antonyms: None.

## **20. License Agreement**

### **License Agreement, Construction:**

A regulatory requirement for construction contractors to bear the responsibility for obtaining necessary licenses and permits and complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of work on fixed-price construction or dismantling, demolition or removal-of-improvements contracts.

### **License Agreement, Foreign :**

A license covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licenses or the licensor

### **License Agreement, General:**

A privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a license is used. Any restrictions on use of the property must be set forth in the agreement to be enforceable.

**License Agreement, Patents and Royalties:**

A legal document setting forth the rights and responsibilities of each party with regard to a patented product as well as the governing provisions on the payment of royalties to the owner of the patent.

**License Agreement, Rights in Technical Data and Computer Software:**

A license incorporated into a government contract setting forth the duties and responsibilities of the parties with regard to rights in technical data and/or computer software.

Synonyms: Franchise, License, Exclusive License, Non-Exclusive License.

Antonyms: None.

Analysis of survey responses yielded the following results:

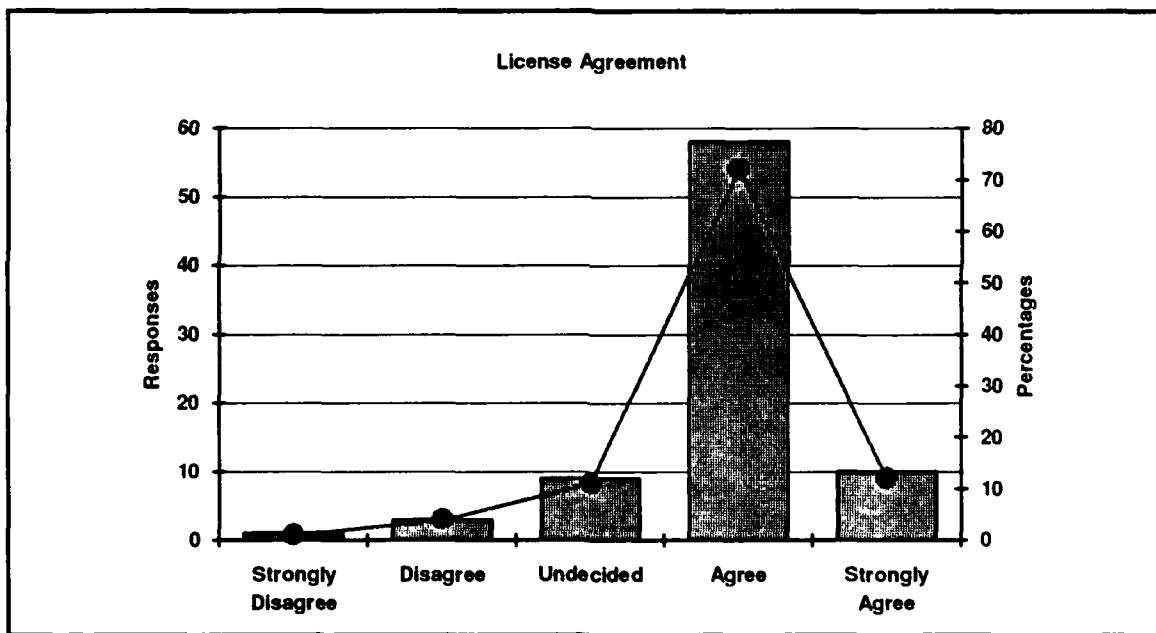


Figure 4-28. License Agreement Survey Results

This lengthy definition "chalked up" a consensus rating of 84%. Ten individuals indicated they were unfamiliar with the term. The majority of these stated, in essence, "Leave it to the lawyers." Six left the Likert Scale for this term blank.

Among those who expressed opinions, a number felt the definition was too long or too disjointed. One commented, "Too many subjects, not truly one agreement." A second stated, "Here again, you have listed different types of licenses. I think your definition is not concise."

Another, miffed by references to the Government, said, "Not all license agreements which exist are incorporated into Government contracts."

There are many types of licensing agreements. Those presented in this definition were provided as examples of such agreements and were neither intended to be all-inclusive nor to split the definition so as to make it incomprehensible. They were intended to clarify and give the reader some insight into the use of LICENSE AGREEMENTS in the context of Government contracts. The researchers have reworded the sub-definitions and added a generic definition of the word license, based on *Black's Law Dictionary* (6:919-21), in an attempt to make it easier to understand. Unfortunately, this made it even longer than it already was. However, each of the sub-definitions can stand on its own and can be listed separately at the time the NCMA dictionary is published.

Other comments were primarily concerned with a word or a phrase in a particular sub-definition. No specific trends were discernible. Each comment was cross-referenced to the sources found during the literature review to see if it was supportable and if there was sufficient merit in the changes suggested to incorporate them into a definition. In most cases these changes were more editorial than substantive in nature. The majority of words or phrases being questioned came from highly respected, well-known sources and there was no particular reason to change them other than the personal preference of the suggestor. Thus they were left alone, with the exception of adding a lead-in to each definition for clarity's sake. The only other revision was to change the term LICENSE AGREEMENT, FOREIGN to LICENSE AGREEMENT, EXCLUSIVE as suggested by three survey respondents.

The final proposed definition incorporating the above changes is listed below.

### **License Agreement**

A legal instrument granting permission to do a particular thing, to exercise a certain privilege, to carry on a particular business, or to pursue a certain occupation. When granted by an appropriate government body, licenses are permits allowing a person, firm or corporation to pursue some occupation or business, subject to regulation. Types of LICENSE

• AGREEMENTS commonly used in Government contracting include, but are not limited to,

- 1. License Agreement, Construction: A term used to denote a regulatory requirement for construction contractors to bear the responsibility for obtaining necessary licenses and permits and complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of work on fixed-price construction or dismantling, demolition or removal-of-improvements contracts.
- 2. License Agreement, Exclusive: A term used to denote a written instrument of understanding covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licensees or the licensor.
- 3. License Agreement, General: A term used to denote a written instrument that grants a privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a license is used. Any restrictions on use of the property must be set forth in the agreement to be enforceable.
- 4. License Agreement, Patents and Royalties: A legal document setting forth the rights and responsibilities of each party with regard to a patented product as well as the governing provisions on the payment of royalties, if required, to the owner of the patent.
- 5. License Agreement, Rights in Technical Data and Computer Software: A term used to denote a written instrument of understanding, incorporated into a government contract, setting forth the duties and responsibilities of the parties with regard to rights in technical data and/or computer software.

• Synonyms: Franchise, License, Exclusive License, Non-Exclusive License, Direct License.

• Antonyms: None.

## **21. Long-Term Contracting**

A method of contracting for required services and supplies over a period of 10 or more years. It is used:

- to sponsor Federally Funded Research & Development Centers (FFRDCs) when an FFRDC meets some special long-term research or development need, integral to the mission and operation of the sponsoring agency, which cannot be met as effectively by existing in-house or contractor resources;
- by GSA in the acquisition of utility services for periods not to exceed 10 years;
- as a way of adding production lots to existing contracts. This method is generally non-preferred because of the likelihood of significant pricing risks to both parties and increased management uncertainty over an extended period, as well as additional complexities introduced where contracts contain a mix of research and development (R&D) and production; and/or
- for management and operating contracts where the work is closely related to the agency's mission and is of long-term or continuing nature, and there is a need (1) to ensure its continuity and (2) for special protection covering the orderly transition of personnel and work in the event of a change in contractors.

Synonyms: Utility Services Contracting, Facilities Contracting, FFRDC Contracting.

Antonyms: None.

Analysis of survey responses yielded the following results:

This term, although unfamiliar to 29% of the respondents and somewhat controversial to the twelve individuals who provided comments, managed to reach a consensus rating of 78%.

The major area of controversy was the quantification of LONG-TERM CONTRACTING as "over a period of 10 or more years." Reexamination of the source data indicates this can be stated more clearly. The researchers have changed the phrase, "over a period of 10 or more years" to "over an extended period" and quantified the period in each sub-definition if it is spelled out in the regulations.

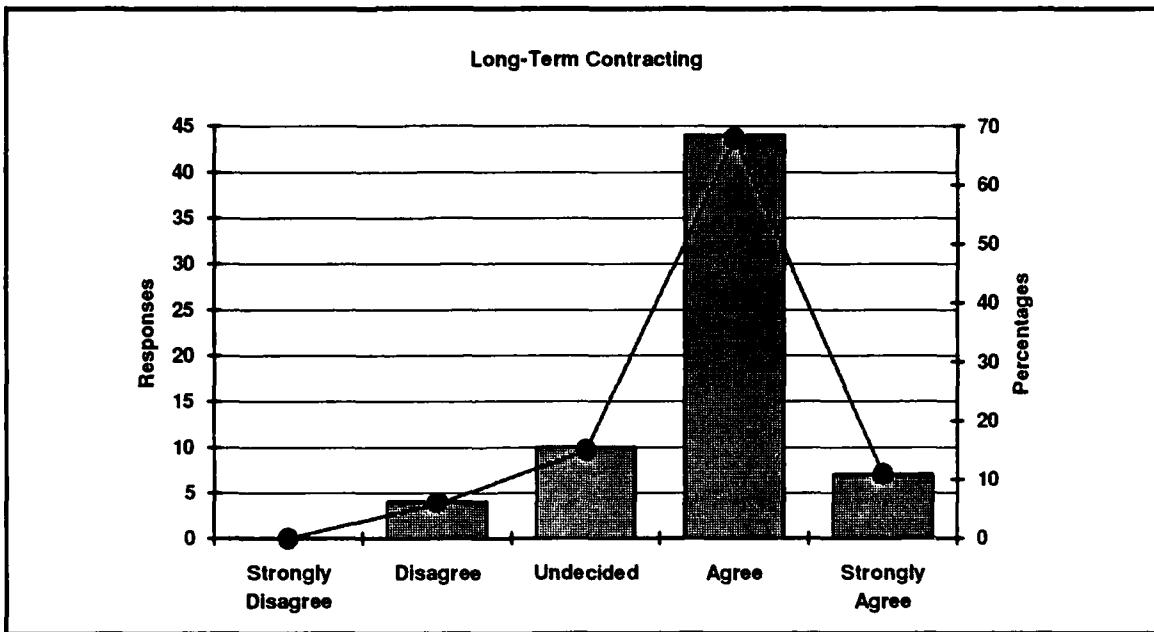


Figure 4-29. Long-Term Contracting Survey Results

FAR and DFARS references have been added where appropriate to enable the reader to find additional information quickly and easily.

Several respondents suggested the addition of "indefinite delivery contracting," "multi-year contracting," "multi-year procurement." The researchers found no references that specifically link these terms to LONG-TERM CONTRACTING.

One respondent wanted a reference to "long-term environmental restoration or remediation contractual instruments" added to the definition. (S)he stated, "These contracts will be the "coming thing" in the future." The researchers were not familiar with this type of contract, however, given the current emphasis on environmental protection and the variety of ongoing clean-up efforts all over the country, this is probably an area that merits more research. Unfortunately, due to the dearth of information found on this subject during the literature review and to constraints on the time available to complete this thesis, we were unable to pursue this particular sub-category.

The proposed final definition, incorporating the revisions discussed above, is:

## **Long-Term Contracting**

A method of contracting for required services and supplies over an extended period. It is used:

- to sponsor Federally Funded Research & Development Centers (FFRDCs), in accordance with FAR 35. Used when an FFRDC meets some special long-term research or development need, integral to the mission and operation of the sponsoring agency, which cannot be met as effectively by existing in-house or contractor resources. The term of the agreement will not exceed 5 years, but can be renewed, as a result of periodic review, in increments not to exceed 5 years;
- by GSA, in the acquisition of utility services for periods not to exceed 10 years, as set forth in FAR 8.3;
- as a way of adding production lots to existing Major Defense Acquisition Program (MDAP) Requests for Proposal (RFPs) and contracts. In this context, "extended period" means approaching or over 10 years. This method is generally non-preferred because of the likelihood of significant pricing risks to both parties and increased management uncertainty over an extended period, as well as additional complexities introduced where contracts contain a mix of research and development (R&D) and production; and/or
- for management and operating contracts, subject to the provisions of FAR 17.6, where the work is closely related to the agency's mission and is of long-term or continuing nature, and there is a need (1) to ensure its continuity and (2) for special protection covering the orderly transition of personnel and work in the event of a change in contractors.

Synonyms: Utility Services Contracting, Facilities Contracting, FFRDC Contracting.

Antonyms: None.

## **22. Material Requirements Planning**

A computerized priority planning and controlling technique based on the quantity and timing requirements of materials whose use is directly dependent on the scheduled production of a larger component or finished product. It is a time-phased explosion of the master production schedule, intended to minimize safety stock or buffer inventories by utilizing bills-of-material and inventory status dates to calculate:

- What parts are needed and whether they should be made or bought;

- How many parts are needed; and
- When the parts must be available to meet the schedule.

Synonyms: Manufacturing Resource Planning (MRP II), Inventory Planning.

Antonyms: None.

Analysis of survey responses yielded the following results:

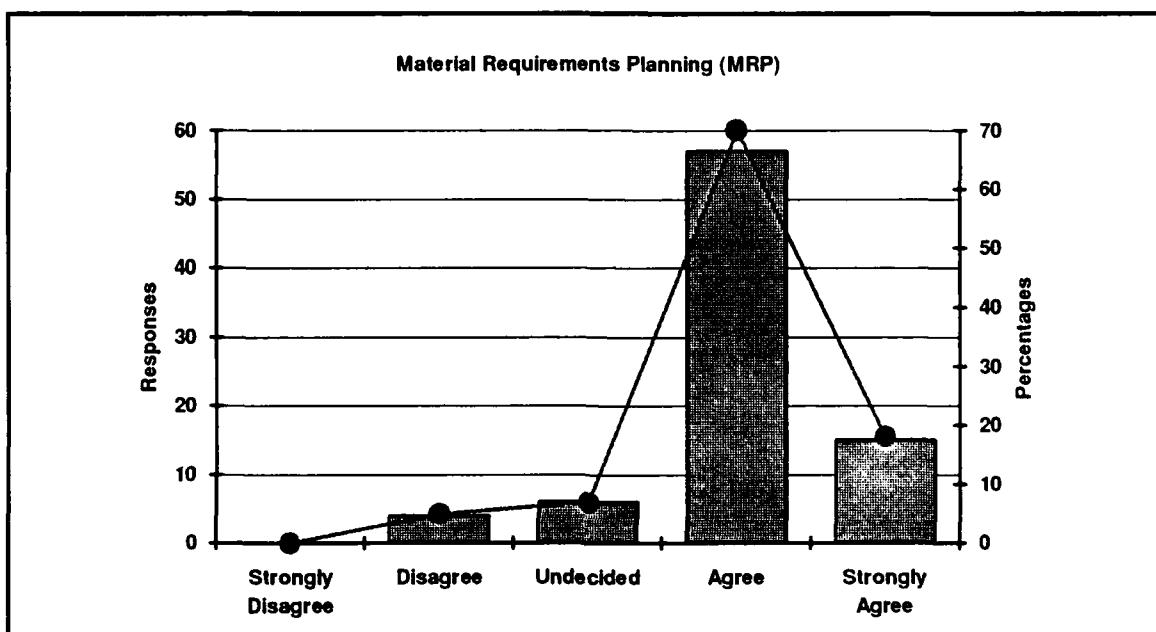


Figure 4-30. Material Requirements Planning Survey Results

Eighty-eight percent (88%) of the respondents to this survey (excluding only the six who left the Likert Scale unmarked and nine who were unfamiliar with the term) marked either "Agree" or "Strongly Agree" with the above definition of MATERIAL REQUIREMENTS PLANNING.

Two people wanted to add "Just-in-Time" and one wanted "dependent demand materials" added to the list of synonyms, however their inclusion was not supported in the literature review.

The only recurring theme among those who proffered comments was that an MRP system does not have to be computerized. This comment is being incorporated into the final proposed definition as set forth below:

## **Material Requirements Planning**

A priority planning and controlling technique (usually computerized), based on the quantity and timing requirements of materials whose use is directly dependent on the scheduled production of a larger component or finished product. It is a time-phased explosion of the master production schedule, intended to minimize safety stock or buffer inventories by utilizing bills-of-material and inventory status dates to calculate:

- What parts are needed and whether they should be made or bought;
- How many parts are needed; and
- When the parts must be available to meet the schedule.

Synonyms: Manufacturing Resource Planning (MRP II), Inventory Planning.

Antonyms: None.

## **23. Materiel Management**

An integrated systems approach to the coordination of materials activities and the control of total materials costs which results in the assignment of the responsibility for all major activities that contribute to the cost of materials to a single operating department or coordinating group. These responsibilities normally include computing requirements, funding, budgeting, storing, issuing, cataloging, standardizing, and contracting functions as well as serving as a communications link among the military logistics functions.

Synonyms: Integrated Materiel Management, Inventory Control, Materiel Control, Materials Management, Supply Management.

Antonym: None.

Analysis of survey responses yielded the following results:

The rate of agreement for the above definition of the term MATERIEL MANAGEMENT was 90%. Five people indicated they were unfamiliar with the term and six failed to mark the Likert Scale.

There appeared to be some confusion among a few of the respondents in regard to the words "materiel" and "material." Normally, the former denotes "the equipment, apparatus, and supplies, as guns and ammunition, of a military force." Apparently, it is also commonly used in commercial or industrial settings to denote "the equipment, apparatus, and supplies of an

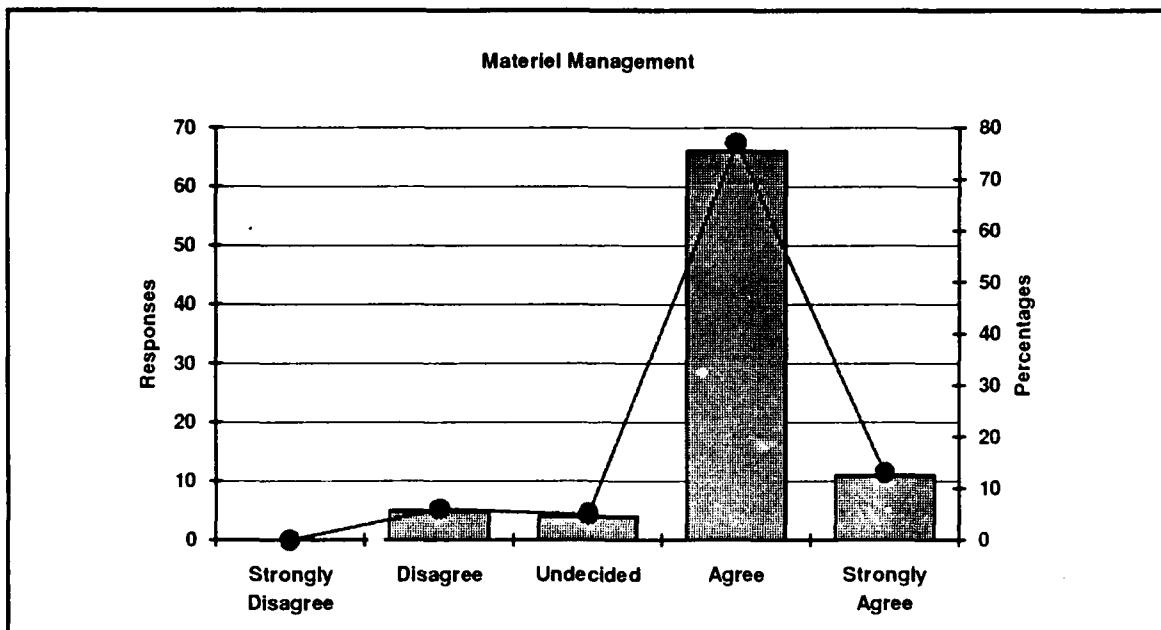


Figure 4-31. Materiel Management Survey Results

organization." In the latter connotation, four people took issue with the last part of the definition, which reads, ". . . as well as serving as a communications link among the military logistics functions." This concern has been addressed by changing it to read, "In the Department of Defense, the department or coordinating group also serves as a communications link among the military logistics functions."

Some respondents understood the listing of responsibilities in the definition to be exclusionary in regard to other unlisted materiel management functions. Quite simply, they were listed as representative examples only. To alleviate this concern, the phrase, "but not limited to" has been added to the definition.

The only other recurring comment was, "Better communications! Shorter Sentences!" We agree that the wording of this definition could stand some improvement and have broken it down into four shorter sentences from two longer ones. The resulting proposed final definition follows:

## **Materiel Management**

An integrated systems approach to the coordination of materials activities and the control of total materials costs. It results in assignment of the responsibility for all major activities that contribute to the cost of materials to a single operating department or coordinating group. These responsibilities normally include, but are not limited to, computing requirements, funding, budgeting, storing, issuing, cataloging, standardizing, and contracting/purchasing functions. In the Department of Defense, the department or coordinating group also serves as a communications link among the military logistics functions.

Synonyms: Integrated Materiel Management, Inventory Control, Materiel Control, Materials Management, Supply Management.

Antonym: None.

## **24. Non-Developmental Item (NDI)**

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace.

Synonyms: Commercial Item, Commercial Off-the-Shelf (COTS), Off-the-Shelf.

Antonym: Developmental Item, Non-commercial Item.

Analysis of survey responses yielded the following results:

The consensus rating for the synthesized definition of Non-Developmental Item (NDI) was 89%. Nine people indicated they were unfamiliar with the term and six did not mark the Likert Scale.

The few comments received were more concerned about the appropriateness of the practice than they were about the definition. One who expressed disgruntlement with the term stated, "I just responded to a N . RFP which was "NDI." There was a tremendous amount of

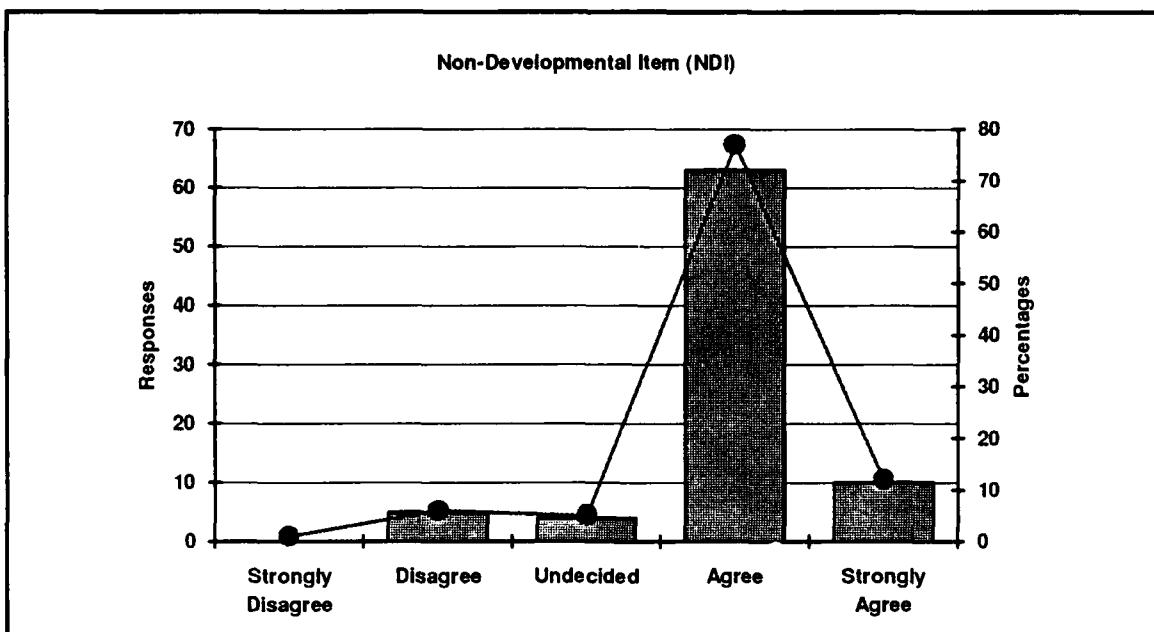


Figure 4-32. Non-Developmental Item (NDI) Survey Results

development for conversion of a previously developed item to a military application. Definition may be OK. Practice needs work." Another said, "I question the utility of this definition." A third commented, "This term is not needed. Use "commercial item" or "off-the-shelf"."

The antonym "non-commercial item" was identified as unsuitable and has been deleted. One respondent commented that he felt "the synonyms have a much broader use and acceptance than the term being defined." However, no alternatives were tendered and they remain intact.

The resulting proposed final definition remains unchanged, except as noted above.

### **Non-Developmental Item (NDI)**

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace.

Synonyms: Commercial Item, Commercial Off-the-Shelf (COTS), Off-the-Shelf.

Antonym: Developmental Item.

## 25. Pilot Production

A period before full rate production begins, during which limited, initial quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production.

Synonyms: First Article(s), Limited Production, Low Rate Initial Production.

Antonyms: Full Rate Production.

Analysis of survey responses yielded the following results:

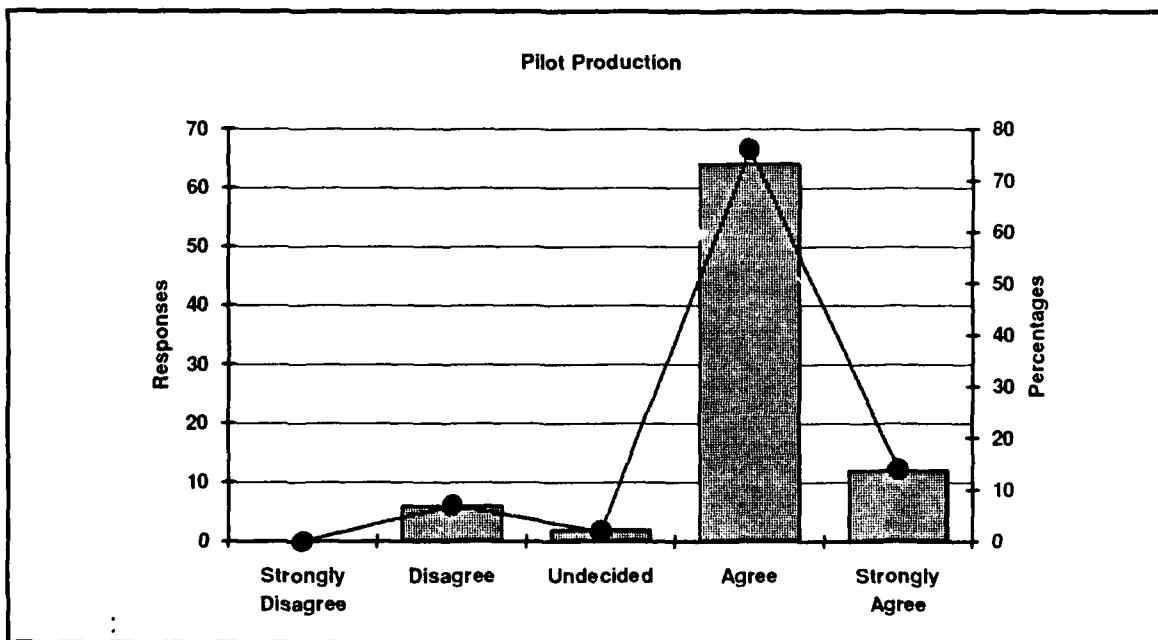


Figure 4-33. Pilot Production Survey Results

The rate of agreement calculated for the term PILOT PRODUCTION is 90%. Six people indicated they were unfamiliar with the term and seven failed to mark the Likert Scale.

One respondent noted, "A production run...not a period." On reflection, the researchers agree with this assessment and have changed the first sentence to read, "An initial production run, normally done before full rate production begins." The word "normally" was added as a result of another comment, "As written PILOT PRODUCTION is linked to Full Rate Production. In today's

environment of limited resources. Full Rate may not necessarily follow PILOT PRODUCTION/LRIP.

Unless the event which occurs prior to PILOT PRODUCTION is addressed, I would avoid linking to Full Rate Production." The researchers did not feel it was appropriate to disassociate PILOT PRODUCTION entirely from Full Rate Production on the basis of one comment, however inclusion of the adverb "normally" allows for flexibility of interpretation by the reader.

During the literature review, it was noted that one of the sources took issue with use of the term "Low Rate Initial Production (LRIP)" as a synonym for PILOT PRODUCTION. The researchers' decided to list it as a synonym and wait to see if enough respondents questioned its use to make deletion from the definition advisable. The results show that the definition has the agreement of 90% of the respondents which is well above the percentage needed for consensus. Only six people specifically commented on its use. Half were pro and half were con. Based on the small percentage of the total responses that addressed LRIP, there does not appear to be sufficient support against its use to merit deletion.

### **Pilot Production**

An initial production run, normally done before full rate production begins. Limited quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production.

Synonyms: First Article(s), Limited Production, Low Rate Initial Production.

Antonyms: Full Rate Production.

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## F. Interpretation of Survey "B" Results

### I. Acquisition Planning (AP)

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. ACQUISITION PLANNING includes developing the overall strategy for managing the acquisition. The strategy considers such factors as: mission needs, funding, alternatives, choice of procurement method, source competence, competition, source selection, delivery, government-furnished property, possible follow-on requirements, and contract administration. ACQUISITION PLANNING should begin as soon as a requirement is identified.

Synonyms: Procurement Planning, Advance Acquisition Planning.

Antonyms: None.

Analysis of survey responses yielded the following results:

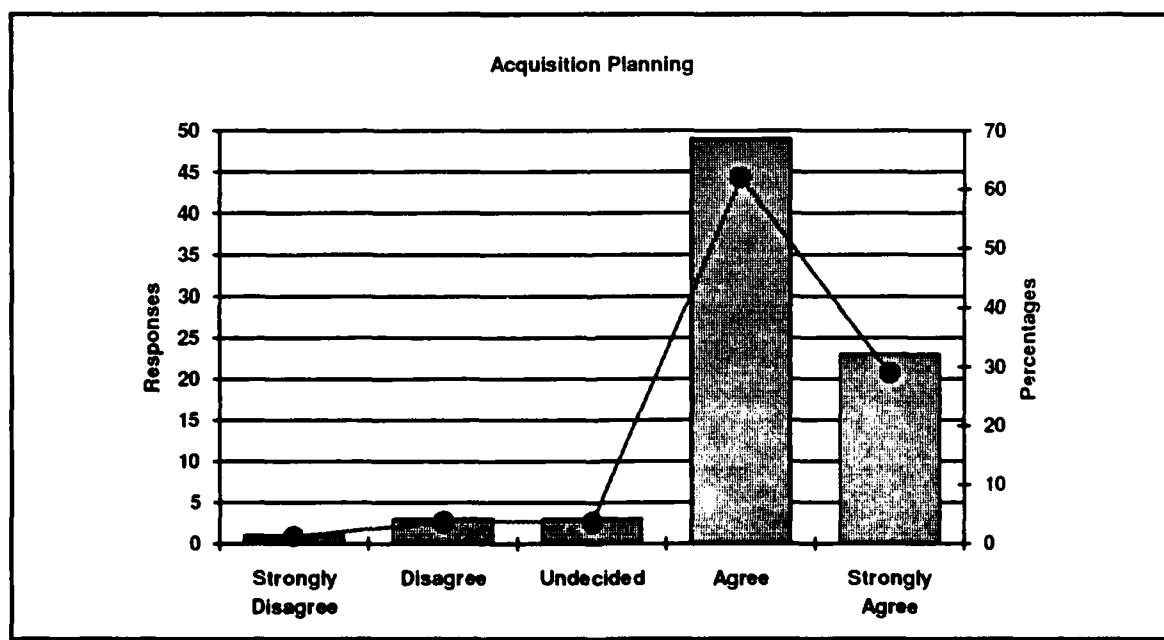


Figure 4-34. Acquisition Planning Survey Results

A large majority (91.1%) of the survey respondents agreed with the proposed definition.

Several respondents suggested listing more factors or issues in the definition. They included:

1. pricing/finance and industrial acquisition issues.

2. contract type selection,
3. CDRL items,
4. producibility, specifications, and statement of work issues,
5. complying with regulations, policy, and statutes.
6. establishing acquisition milestones.

All of the above issues should be considered in ACQUISITION PLANNING. However, the definition, to avoid pages of examples, should not include every possible issue that ACQUISITION PLANNING may consider. Two respondents stated the proposed definition was already too long. Therefore, the number of examples the definition contains should be prudently limited. The third sentence is intended to give the reader an idea of the factors AP takes into consideration, not to be an all inclusive list.

There was some disagreement about when ACQUISITION PLANNING should start. According to respondents, it begins at different times depending on the circumstances of the acquisition. In addition, the exact point at which ACQUISITION PLANNING starts is not essential to the definition. Therefore, to avoid confusion and conflict, the last sentence has been eliminated.

The final list of proposed synonyms will include the term "acquisition strategy planning" as suggested by a respondent. The final proposed definition is:

### **Acquisition Planning (AP)**

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner, at a reasonable cost, with acceptable quality. ACQUISITION PLANNING includes developing the overall strategy for managing the acquisition. ACQUISITION PLANNING includes, but is not limited to, such factors as: mission needs, funding, technical considerations, contract type, source capability, competition, procurement method, government-furnished property, laws and regulations, possible follow-on requirements, and contract administration.

**Synonyms:** Procurement Planning, Advance Acquisition Planning, Acquisition Strategy Planning.

**Antonyms:** None.

## 2. Acquisition Streamlining

Any effort that results in more efficient and effective use of resources to design, develop, produce, and deploy quality systems and products. This includes ensuring that only necessary and cost effective requirements are included, at the most appropriate time, in solicitations, standards, and contracts for the design, development, production, and deployment of new systems, or for modifications to existing systems that involve redesign of systems or subsystems. The objective of ACQUISITION STREAMLINING is to reduce the time and cost required for an acquisition and to improve the quality of those systems by tailoring requirements to meet acquisition needs.

Synonyms: Procurement Streamlining, Streamlining.

Antonyms: None.

Analysis of survey responses yielded the following results:

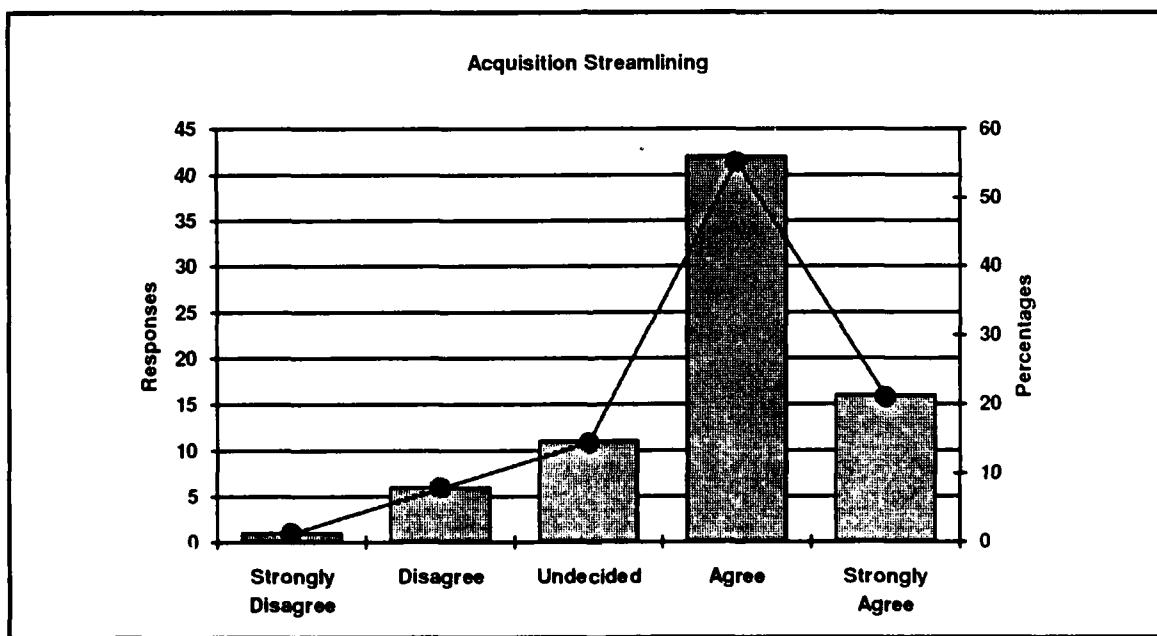


Figure 4-35. Acquisition Streamlining Survey Results

This definition received a 76.3% rate of approval. Among the comments received were those of six respondents who indicated that the term should include a stronger reference to reducing or eliminating non-value requirements. Other comments included:

1. The goal should be to eliminate/reduce the number and frequency of serial "show and tell" milestones.

2. All acquisition planning should lean toward the minimum requirements to meet the primary objective.
3. Change words in second sentence from "necessary and cost effective" to "value added".
4. Acquisition streamlining should center around the streamlining of laws/regulations. (two respondents).

One person felt the last sentence should become the first sentence since it states the objective of ACQUISITION STREAMLINING which is to reduce time and cost, and to increase the quality of the product. However, the researchers felt that it was more appropriate to describe what ACQUISITION STREAMLINING is first, and describe the objective afterwards. Three people stated that ACQUISITION STREAMLINING should stress quality and not just cost and time. Based on these comments and the judgment of the researchers, the final proposed definition is:

### **Acquisition Streamlining**

Any effort that results in more efficient and effective use of resources to design, develop, produce, and deploy quality systems and products. The objective is to reduce the time and cost required for an acquisition and to improve the quality of those systems by tailoring requirements to meet acquisition needs. This includes, but is not limited to, ensuring that only value added requirements are included, at the most appropriate time, in specifications, standards, and contracts for the design, development and deployment of new systems, or for modifications to existing systems that involve redesign of systems or subsystems.

Synonyms: Program Streamlining, Streamlining.

Antonyms: None

### **3. Allocated Baseline**

The second baseline is the allocated baseline. The other two are functional and product baselines. The ALLOCATED BASELINE begins as the system specification is expanded and refined. Contractor are prepared for all new configurations. These development specification define the ALLOCATED BASELINE for a system's Allocated Configuration Items (ACI).

An ACI, which is the allocated baseline plus approved changes, normally consists of a series of Type B specifications defining the functional requirements for each major Configuration Item (CI). These may be supplemented by other type of specifications, engineering drawings and related data, as necessary to specify: (1) all essential CI functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

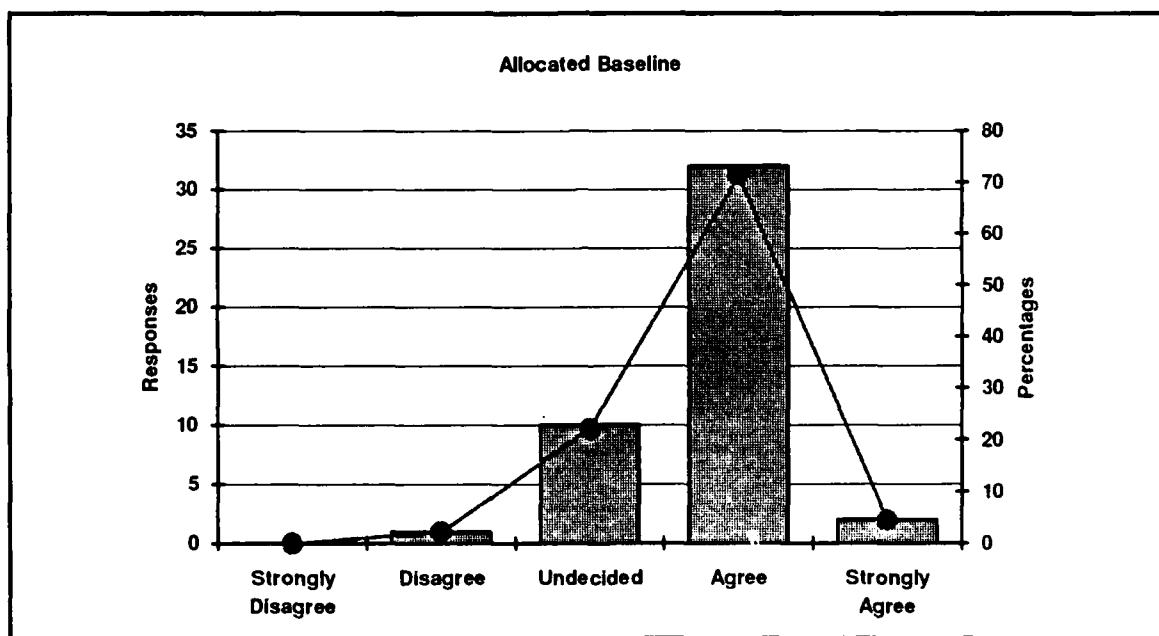


Figure 4-36. Allocated Baseline Survey Results

The approval rate for the definition is 75.6%, excluding only respondents unfamiliar with the term or those who left the Likert Scale unmarked. A total of 76 people marked the scale with only one person expressing disagreement with the definition. However, 12 respondents left the definition unmarked, 10 marked "Undecided" and 31 marked "Unfamiliar with Term." Therefore, over 60% ((12+10+31)/88) of the respondents did not have a clear opinion on the definition. This high rate of "no opinion" may indicate the term is not frequently used by the Certified Professional Contracting Managers (CPCMs) who comprise the survey's population. This term is primarily

used in the Configuration Management community which may explain the high number of unmarked, unfamiliar and undecided responses.

Respondents made few comments about this definition. Two respondents stated that this term was too long. Two had different opinions on the contractor's role in establishing the ALLOCATED BASELINE. One respondent stated "The real problem is to get the contractor and the acquisition organization to play from the same sheet of music on what the words mean." Another wrote "the contractor should not be involved." Neither suggested changing the definition.

The final proposed definition is:

### **Allocated Baseline**

The second of three baselines generally considered in Configuration Management. The other two are functional and product baselines. The ALLOCATED BASELINE begins as the system specification is expanded and refined. Contractor specifications are prepared for all new configurations. These development specifications define the ALLOCATED BASELINE for a system's Allocated Configuration Items (ACI).

An ACI, which is the ALLOCATED BASELINE plus approved changes, normally consists of a series of Type B specifications defining the functional requirements for each major Configuration Item (CI). These may be supplemented by other type of specifications, engineering drawings and related data, as necessary to specify: (1) all essential CI functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic.

Synonyms: None.

Antonyms: None.

### **4. Baseline Cost Estimate**

The first detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is performed early in the program and serves as the base point for all subsequent tracking and auditing purposes.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

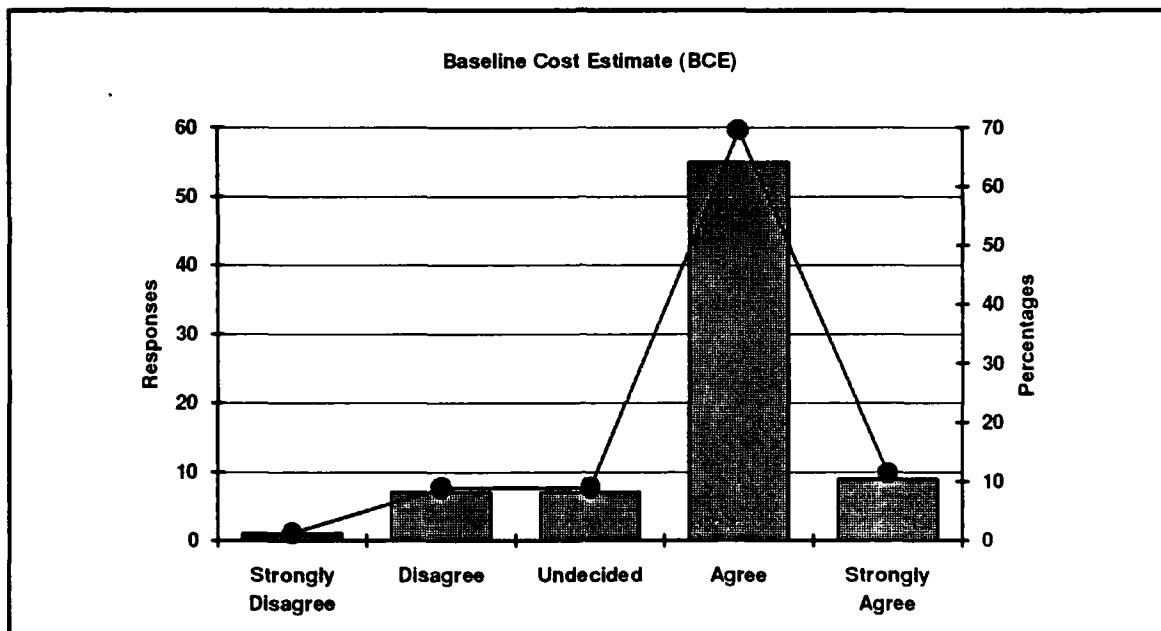


Figure 4-37. Baseline Cost Estimate (BCE) Survey Results

A large majority, 81% of the respondents, agreed with the synthesized definition. However, a few respondents disagreed with some of the wording. Four stated that the BASELINE COST ESTIMATE (BCE) may not necessarily be the first estimate. Another person suggested replacing the word "performed" with "prepared" in the second sentence. The final proposed definition incorporates these suggestions.

Several respondents included their opinions on the quality or the appropriateness of a BASELINE COST ESTIMATE. However, personal opinions should not be included in the definition. Therefore, these comments will not be discussed or included in the final proposed definition.

Two people did not agree that every BASELINE COST ESTIMATE is prepared "early in the program." Thus, the final definition will add the word "frequently" in the second sentence. The final proposed definition is:

### **Baseline Cost Estimate**

A detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is frequently prepared early in the program and serves as the base point for all subsequent tracking and auditing purposes.

Synonyms: None.

Antonyms: None.

### **5. Contractor Inventory**

1. Any property that the Government is obligated to, or has the option to, take over, under any type of contract, as a result, either of any changes in the specifications or plans thereunder or, of the termination of the contract (or subcontract thereunder), prior to completion of the work, for the convenience or at the option of the Government.
2. Any property acquired by and in the possession of a contractor or subcontractor (including Government-furnished property) under a contract, pursuant to the terms of which, title is vested in the Government and in excess of the amounts needed to complete full performance under the entire contract.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

This definition received only a 47.3% approval rating, the lowest in the Survey B, which does not meet the mandatory requirement of 66% for consensus, as set forth in the methodology described in Chapter III. The major reason for this deficiency appears to be that the proposed definition was only related to contractor inventory that could be classified under FAR 45. However, CONTRACTOR INVENTORY consists of two categories. First, it may be comprised of items classified under FAR 45. Second, it may include items outside the scope of FAR 45, such as CONTRACTOR INVENTORY covered under commercial contracts. The proposed synthesized definition only addressed those items classified in the first category. Numerous respondents explained that the proposed definition did not cover the second classification.

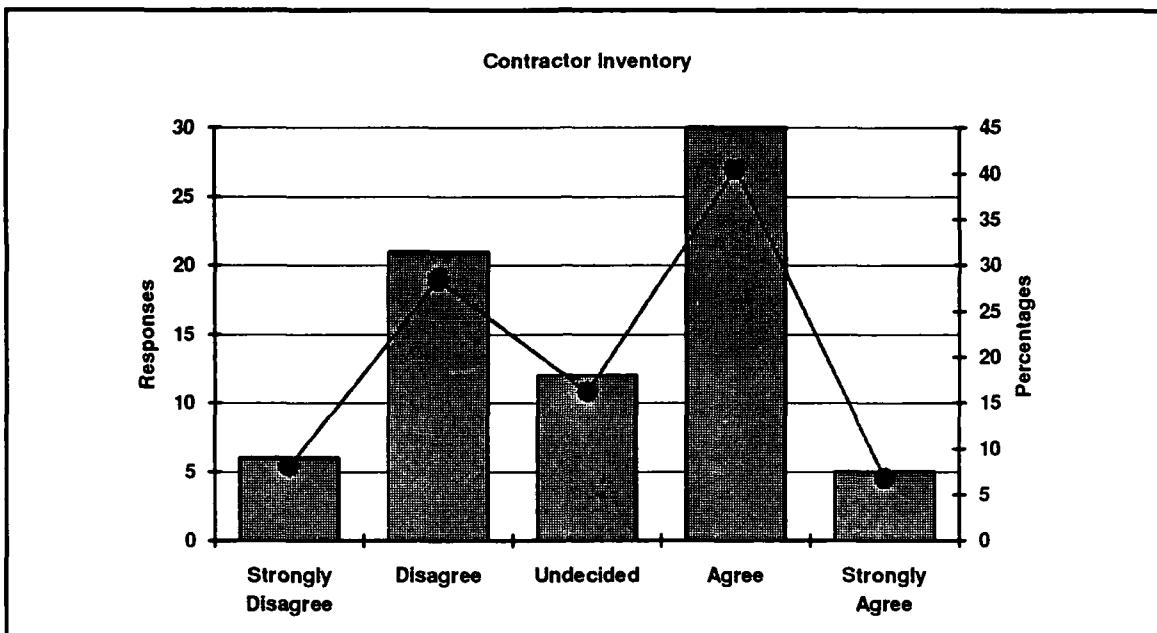


Figure 4-38. Contractor Inventory Survey Results

The researchers have been advised that a federally appointed committee is presently responsible for rewriting FAR 45. The revision will include the new official definition of the first classification of CONTRACTOR INVENTORY. Proposing a final definition in this thesis may conflict with the anticipated FAR revision. Therefore, this definition has been deleted from the final definition listing to avoid such a conflict over the meaning of this term. It is the opinion of the researchers that publication of this definition will be of little benefit. Therefore, it is recommended that further research be conducted after the new FAR 45 is published. This definition is deleted based on:

- the low rate of agreement for the proposed synthesized definition, and
- the anticipated revision of FAR 45.

## 6. Functional Baseline

The first of three baselines generally considered in Configuration Management. The other two are allocated and product baselines. Baselines provide the basis for contracting and controlling system design. The FUNCTIONAL BASELINE is defined by the system specification prepared during the concept exploration phase which defines the FUNCTIONAL BASELINE for the system Functional Configuration Items (FCI).

The FCI which is the FUNCTIONAL BASELINE plus approved changes, will normally include a type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

The approval rating for the synthesized definition of FUNCTIONAL BASELINE is 83.6%, excluding respondents who identify themselves as unfamiliar with the term and those who left the Likert Scale unmarked. A total of 78 people responded to this definition with no one expressing disagreement. Of an overall 88 respondents, a total of 10 people left the scale unmarked, 9 marked "Undecided" and 23 indicated they were "Unfamiliar with Term." Therefore, nearly 48% ((10+9+23)/88) of the respondents did not express an opinion on the definition. This high rate of "no opinion" may indicate the term is not frequently used by the Certified Professional Contracting Managers who comprised the survey population. This term is primarily used in the Configuration Management community which may explain the high number of unfamiliar and undecided responses.

Respondents made few comments about this definition. Two commented that it was too long. Another recommended that the third sentence should be deleted since this sentence describes generically what a baseline is. Since the intent of the definition is to provide the reader with an understanding of the meaning of a FUNCTIONAL BASELINE, the researchers concur with the respondent that the third sentence does not add value in defining a FUNCTIONAL BASELINE and should be deleted. The final proposed definition is:

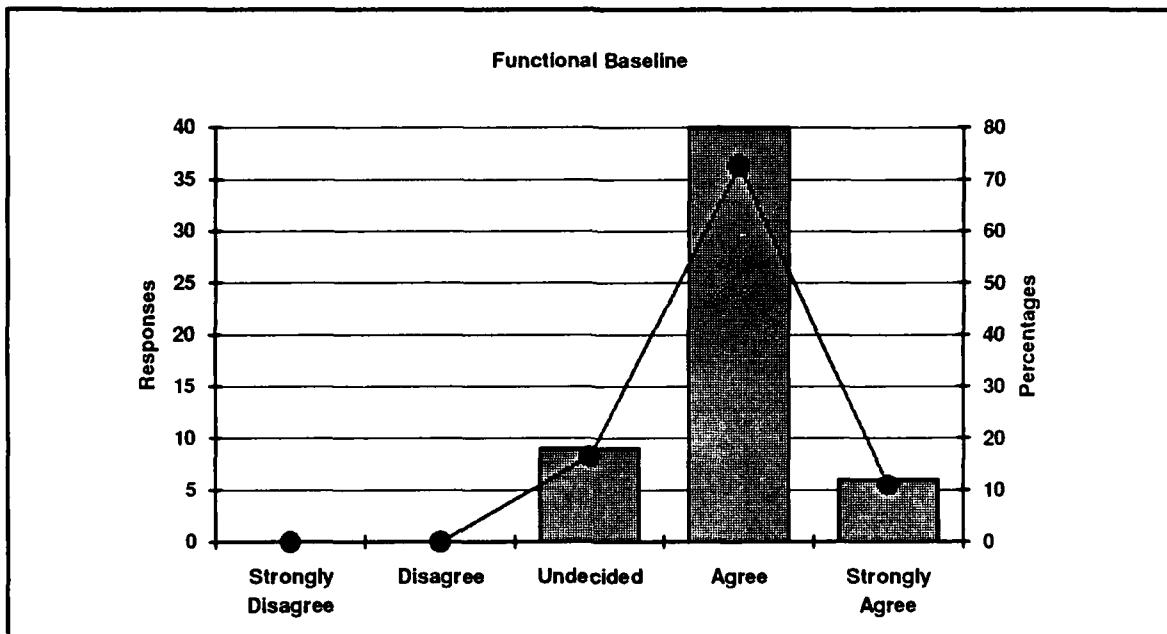


Figure 4-39. Functional Baseline Survey Results

### **Functional Baseline**

The first of three baselines generally considered in Configuration Management. The other two are allocated and product baselines. The FUNCTIONAL BASELINE is defined by the system specification, prepared during the concept exploration phase, which defines the FUNCTIONAL BASELINE for the system Functional Configuration Items (FCI).

The FCI, which is the FUNCTIONAL BASELINE plus approved changes, will normally include a Type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic.

Synonyms: None.

Antonyms: None.

### **7. Government Purpose License Rights**

Contractually specified rights to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Such rights are valid for a stated period of time. The Government is entitled to unlimited rights after the such time period expires.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

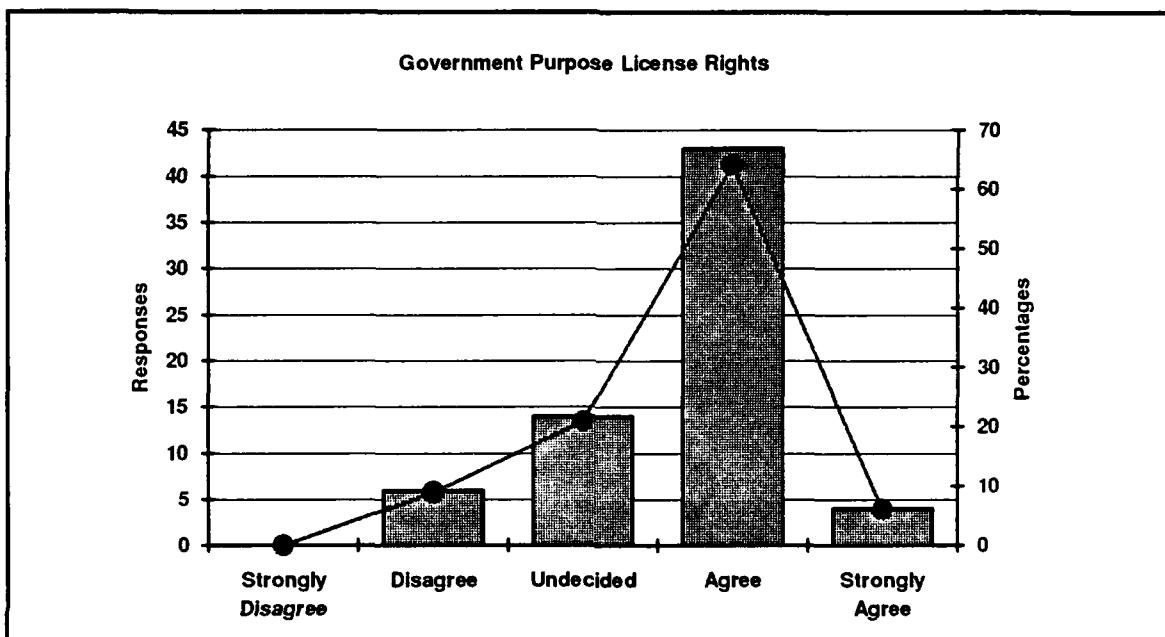


Figure 4-40. Government Purpose License Rights Survey Results

A majority (70.1%) of the respondents who expressed an opinion agreed with the definition. Comments included:

1. In my experience unlimited rights are a legal issue that would have to be reviewed on a case by case basis. Question on "The Government is entitled to unlimited rights after the such time period expires."
2. I'm not sure the Government has any rights, let alone unlimited rights, after the time period for special purpose rights expires.
3. GOVERNMENT PURPOSE LICENSE RIGHTS may be negotiated which do not entitle the Government to unlimited rights after the time period expires.
4. Was not aware that passage of time gave Government unlimited rights.
5. Replace last sentence with "The government rights continue to be owned, and may be used, by the government, notwithstanding the licensed rights."

6. There is too much controversy over this subject to attempt to define it now, especially in this fragmented manner. Additionally, you may be oversimplifying this definition.
7. Change first line to read: "Government rights which, through license, Contractors are authorized to use, duplicate, and disclose in whole or in . . ."

The first five comments listed questioned the accuracy of the last sentence of the definition. Consequently, the last sentence has been deleted. The researchers agree with the sixth comment that the "GOVERNMENT PURPOSE LICENSE RIGHTS" concept is very controversial. This belief is strengthened by the fact that 10 people marked "Unfamiliar with Term," 14 people marked "Undecided" and 11 chose not to mark the Likert Scale at all.

The final definition will not incorporate the last comment since it is not totally accurate. The comment states that only "Contractors are authorized" to use the data. This is only partially true. The government and/or authorized contractors may use the data. The researchers believe the proposed first sentence is accurate and will not change it. The final proposed definition is:

### **Government Purpose License Rights**

Contractually specified rights to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Such rights are valid for a stated period of time.

Synonyms: None.

Antonyms: None.

## **8. Office of Federal Procurement Policy (OFPP)**

An organization, created in 1974, within the Office of Management and Budget (OMB), responsible for providing overall executive branch guidance, leadership, and direction of Government procurement policy and regulations to be followed by executive agencies in acquiring goods, services, and facilities.

The OFPP's leadership role in the procurement process entails, among other things, chairing the Federal Acquisition Regulatory (FAR) Council, providing for GSA's Federal Procurement Data System (FPDS), providing for a Federal Acquisition Institute (FAI) at GSA, consulting with agencies (including the Small Business Administration (SBA)), developing innovative procurement methods and procedures to be tested by selected executive agencies, issuing policy letters

including conflict-of-interest standards for individuals providing consultant services, establishing and maintaining the Cost Accounting Standards (CAS) Board, and serving as advocate for the acquisition of Commercial Products.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

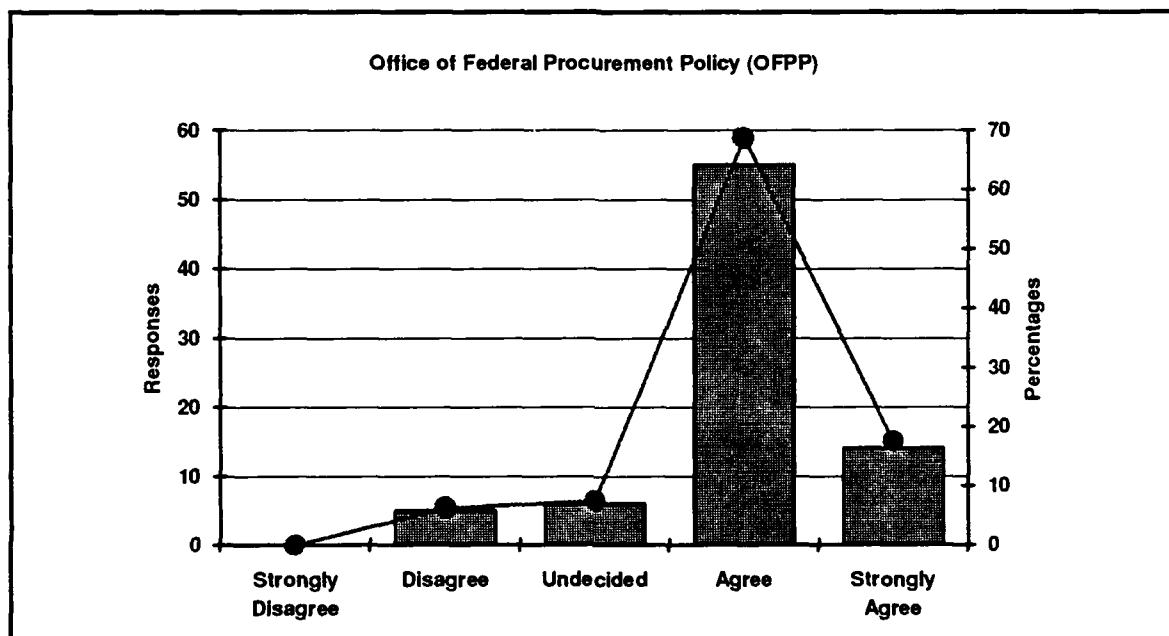


Figure 4-41. Office of Federal Procurement Policy (OFPP) Survey Results

This term had an approval rating of 86.3%. Three people felt that the second paragraph should be deleted. Their comments are:

1. The second paragraph is a roles and mission statement and not part of a definition. The first paragraph is an acceptable definition.
2. Drop second paragraph.
3. Second paragraph: states responsibilities, not a definition. Recommend deletion.

Additionally, the researchers recognize that OFPP missions and/or responsibilities will change over time and that this definition will be outdated if and when the mission is changed. Taking the above into consideration, the researchers concur that the second paragraph can be deleted from the final definition. Two other people recommended changes to the second paragraph.

however, these recommendations are not relevant since the second paragraph will be deleted from the final definition.

Only one respondent made a comment about the first sentence,

First paragraph change as follows: "An OMB subordinate organization responsible for ..." Everyone knows (or should know) what OMB stands for (just as he/she knows what DoD stands for). Also, the fact that OFPP was created in 1974 is irrelevant. Delete.

The researchers do not agree that "everyone knows or should know what OMB stands for." Consequently, the final definition will spell out "Office of Management and Budget". Stating the year OFPP was created gives the reader a reference point for how long the office has been in existence and will be left in the final definition. Therefore, the above suggestions will not be incorporated in the final definition. The final proposed definition is:

#### **Office of Federal Procurement Policy (OFPP)**

An organization, created in 1974, within the Office of Management and Budget (OMB), responsible for providing overall executive branch guidance, leadership, and direction of Government procurement policy and regulations to be followed by executive agencies in acquiring goods, services, and facilities.

Synonyms: None.

Antonyms: None.

#### **9. Plant Equipment**

In both cases, a majority of our respondents agreed with the proposed definitions for two types of plant equipment, INDUSTRIAL PLANT EQUIPMENT (75.8%) and OTHER PLANT EQUIPMENT (76.4%). However, after these definitions were synthesized and sent to the survey groups, the researchers became aware that a federal committee had been appointed to rewrite FAR 45 which deals with Property Management. Since the resulting newly revised part of the FAR will include the official definitions of these terms, it is recommended that the members of this federal committee review our survey results before publishing new definitions for INDUSTRIAL PLANT EQUIPMENT and OTHER PLANT EQUIPMENT in FAR 45.

**a) Industrial Plant Equipment (IPE)**

Plant equipment in Federal Stock Group 34, with an acquisition cost exceeding a specified level, used for cutting, abrading, grinding, shaping forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or Research & Development operations.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

A majority (75.8%) of our respondents agreed with the proposed definition. A total of 16 individuals of the 88 respondents indicated they were unfamiliar with the term and 6 left the Likert scale blank.

Two respondents questioned the use of "Federal Stock Group 34" in the definition. However, this concept provides the reader a reference if they questioned whether a particular type of equipment is considered to be IPE. Therefore, "Federal Stock Group 34" will remain in the definition.

Another respondent recommended that the definition "need[s] to show the specified level cost." However, this threshold changes from time to time. Therefore, the researchers purposely used the words "with an acquisition cost exceeding a specified level" because this definition will be outdated the next time the threshold is changed. This change may occur when the federal committee rewrites FAR 45.

Yet another person suggested replacing "entailed" with "used." The researchers disagree since this suggestion does not add any clarity to the definition and is only a personal preference of one respondent. All other respondents agreed with using the word "entailed." The same person recommended adding a "," between the words "shaping" and "forming." The final proposed definition, shown below, will incorporate this recommendation.

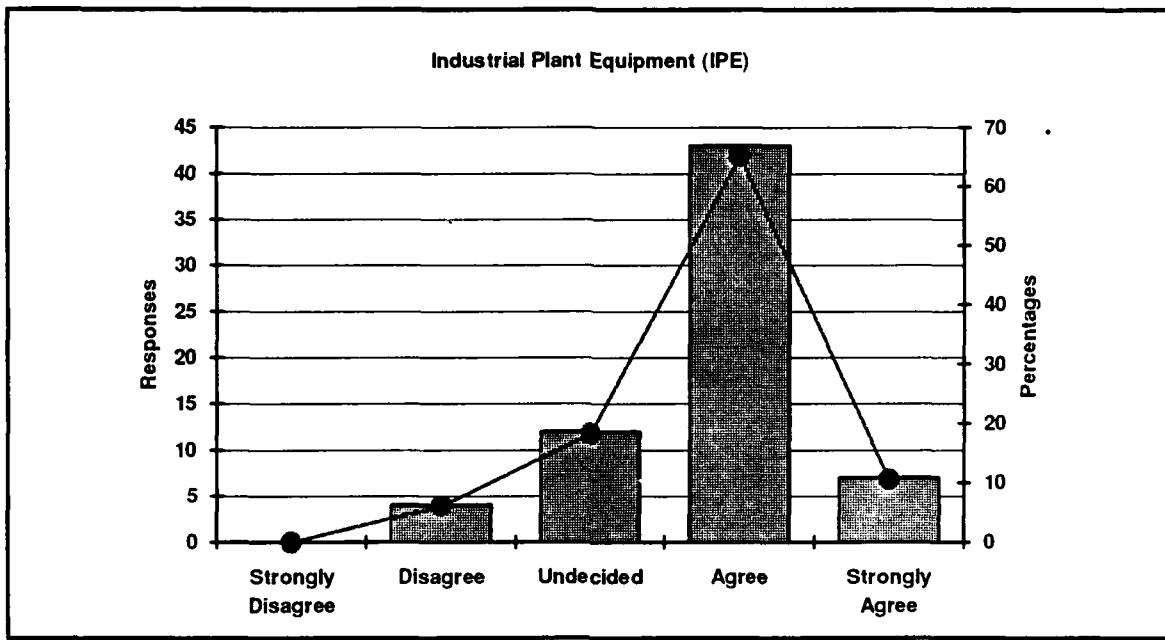


Figure 4-42. Industrial Plant Equipment (IPE) Survey Results

### **Industrial Plant Equipment (IPE)**

Plant equipment in Federal Stock Group 34, with an acquisition cost exceeding a specified level, used for cutting, abrading, grinding, shaping, forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or Research & Development operations.

Synonyms: None.

Antonyms: None.

### **b) Other Plant Equipment (OPE)**

That part of plant equipment regardless of dollar value, which is used in, or in conjunction with, the manufacture of components or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as Industrial Plant Equipment (IPE).

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results.

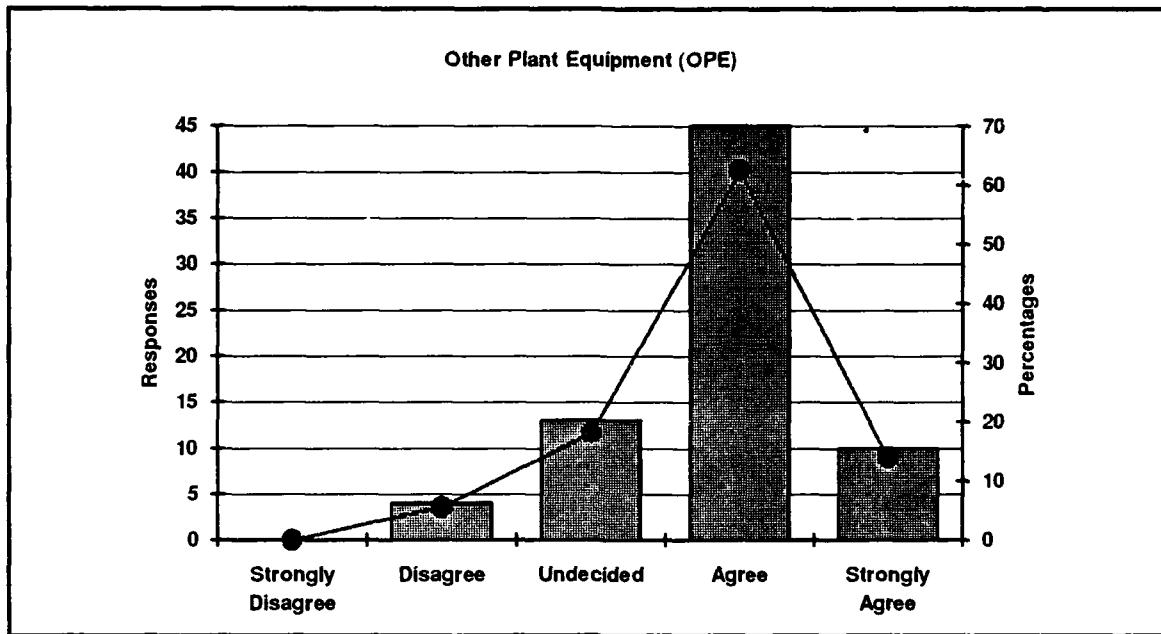


Figure 4-43. Other Plant Equipment (OPE) Survey Results

The approval rate for this definition is 76.4%, excluding responses from those who were not familiar with the term (8) and those who left the response blank (8). Three people took exception with the phrase "regardless of dollar value." The literature review of OTHER PLANT EQUIPMENT references five sources that use the "regardless of dollar value" concept in their definitions. The point of this concept is that there is no dollar threshold for plant equipment to be considered OTHER PLANT EQUIPMENT. Therefore, it is considered valid as originally stated and will remain in the definition.

One person recommended adding "Special Test Equipment (STE) and Special Tooling (ST)" after IPE. Another person recommended adding "ADPE" [Automated Data Processing Equipment]. A third person asked if there are only two classifications of plant equipment. However, FAR 45.101 and *The Reference Book* state that plant equipment "does not include special tooling or special test equipment" (28; 29; 48:248). *The Reference Book* further states, "The DFARS categorizes plant equipment as 'INDUSTRIAL PLANT EQUIPMENT (IPE)' or 'OTHER PLANT EQUIPMENT (OPE)'" (48:248). Therefore, the respondents comments are considered to be incorrect and will not be included in the final proposed definition.

One person suggested deleting the word "maintenance". The researchers believe that "maintenance" should remain in the definition. Another person recommended adding "and/" between "components" and "or." This recommendation will be incorporated in the final definition. The final proposed definition is:

### **Other Plant Equipment**

That part of plant equipment regardless of dollar value, which is used in, or in conjunction with, the manufacture of components and/or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as Industrial Plant Equipment (IPE).

Synonyms: None.

Antonyms: None.

### **10. PLANT CLEARANCE OFFICER (PLCO)**

The PLANT CLEARANCE OFFICER is responsible for all actions relating to the screening, redistribution, and disposal of contractor inventory from a contractor's plant or work site. This includes executing sales contracts and contracts incidental to the removal of Government property and excess and surplus contractor inventory from contractor's plants. The term "contractor's plant" includes Government-Owned Contractor-Operated (GOCO) facilities. The contracting officer assigns these responsibilities to the plant clearance officer.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

A large majority (87.3%) of our respondents agreed with the proposed definition, however a sizable number also provided comments, they believed would improve it, as follows:

1. Replace with the following:

**PLANT CLEARANCE OFFICER (PLCO):** The Warranted individual, at a particular location/contractor site, with prescribed responsibilities for designated contracts, who has overall responsibility for the disposal/disposition effort. The

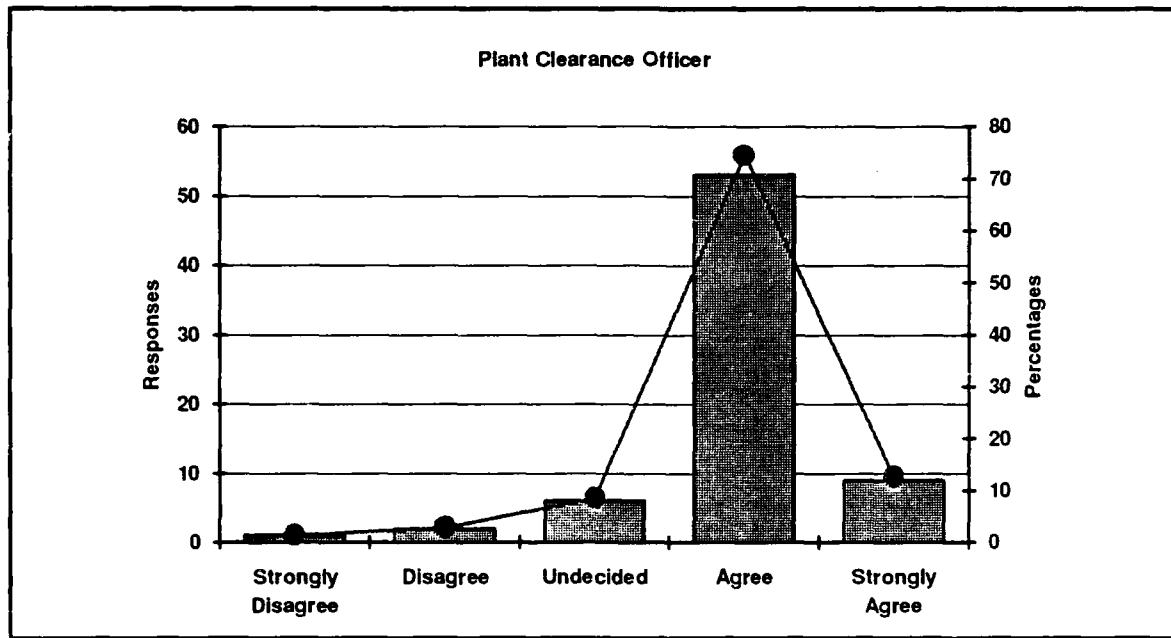


Figure 4-44. Plant Clearance Officer Survey Results

PLCO is responsible for the acceptance of inventory schedules submitted by the contractor (Conventional), or performs verification tasks on completed schedules (Modified). The PLCO represents the Government Contracting Officer in all cases pertaining to the disposal/disposition of assets. The PLCO is responsible for the following tasks: Scrap Disposal, Surplus Sales Operations, Reutilization Screenings/Determinations and approvals, Contractor/Vendor (including some restocking fees for the Vendor) purchase at the original acquisition cost, Pre-Inventory Scrap Determinations, Screening Date Controls, Abandonment and Donation Tasks, Demilitarization Tasks, Performs Allocability Surveys, and Assists the TCO/ACO during contract Completions/Terminations.

2. What about Modified Plant Clearance as used by DoD. Your definition doesn't reflect this situation.
3. Change first sentence to read: "An official, appointed by the CO, responsible for .... disposal of specified excess and surplus Government-titled property and/or contractor-titled property from GOCO facilities". Delete second, third and fourth sentences.
4. First sentence between "is" and "responsible" add "an authorized representative of the contracting officer". Delete last sentence.
5. Add scrap to the categories
6. Second sentence, delete everything between plants and Government. The term "contractor's plant" should not include GOCOs.

7. Last sentence - "assigns" should be replaced with "delegates".
8. Definition depends on definition of "Contractor Inventory". More significantly, does authority of Plant Clearance Officer conflict with authority of Property Administrator? Need clarification.
9. Take out "or" off of "Contractor" in first sentence. Add to second sentence - "where there is no government approved property management system under which property is disposed based on TCO direction.
10. I believe the definitions speak to contractor acquired inventory, instead of contractor inventory which could include property for commercial contracts. It depends on the context of usage. I would also add scrap to the above categories.
11. However, the contracting officer often doesn't do the assignment--the bureaucracy does!

The first respondent commented that his/her definition was more accurate. However, the listing of the PLANT CLEARANCE OFFICER'S responsibilities (last sentence) is a job description and not a definition. The suggested definition makes a distinction between "modified" and "conventional" plant clearance. A second person also pointed out that this distinction should be made. After consultation with Dr. Douglas N. Goetz, a recognized expert on Property Administration, the researchers came to the conclusion that the concept suggested in the second sentence should be added to the final definition. The third and fourth comments have also been incorporated into the final definition. These revisions make the proposed synthesized definition's second, third, and fourth sentences obsolete. The changes made to the final definition will also remedy the problems highlighted in the last seven comments.. Taking the above into consideration, the final proposed definition is:

#### **PLant Clearance Officer (PLCO)**

A government official, who is the authorized representative of the contracting officer responsible for all actions relating to the screening, redistribution, and disposal of specified excess and surplus Government-titled property and/or contractor-titled property from GOCO facilities. This individual is responsible for acceptance of inventory schedules submitted by the contractor in "Conventional" Plant Clearances, or performs verification tasks on completed schedules in "Modified" Plant Clearances.

Synonyms: None.

Antonyms: None.

## **11. Product Assurance**

A discipline which assures that all critical activities are identified; that resources are developed for each activity; and that these resources are applied to each project to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results.

A majority (72.2%) of the respondents agreed with the above definition. Three respondents indicated the term "Quality Assurance (QA)" should be added as a synonym. "Quality Assurance" and PRODUCT ASSURANCE may or may not be synonymous depending on the context in which they are used. Consequently, the researchers feel that "quality assurance" should not be listed as a synonym.

Six respondents gave conflicting opinions. Four respondents believed the definition was too broadly worded while two respondents believed the opposite. The researchers believe a balance has been achieved and will not change the term based solely on these comments.

Another person suggested replacing the word "project" in the third line with the word "activity" to keep the definition consistent. This suggestion has been incorporated into the final definition as set forth below. The final proposed definition is:

### **Product Assurance**

A discipline which assures that all critical activities are identified; that resources are developed for each activity; and that these resources are applied to each activity to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

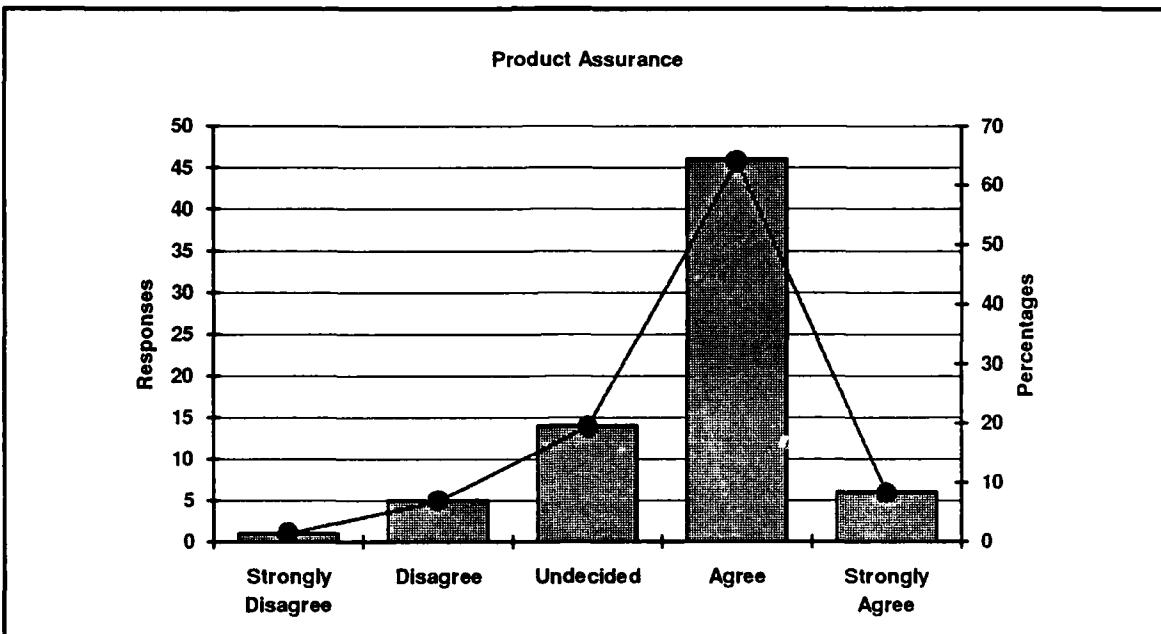


Figure 4-45. Product Assurance Survey Results

Synonyms: None.

Antonyms: None.

## 12. Product Baseline

The third of the three baselines generally considered in Configuration Management. The other two are functional and allocated baselines. The product baseline is established prior to the commencement of production as a set of minimum system performance requirements that must be met by the system in production in order to satisfy the specified system operational requirements. This baseline is the basis for control during the production and operational periods.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

The rate of agreement for this definition is 86% with only two people expressing disagreement. It is noted that respondents unfamiliar with the definition are excluded from the calculation as are those who left their Likert Scales unmarked. Out of a total of 88 people responding to the survey, 78 responded to this term, leaving 10 who left the Likert Scale

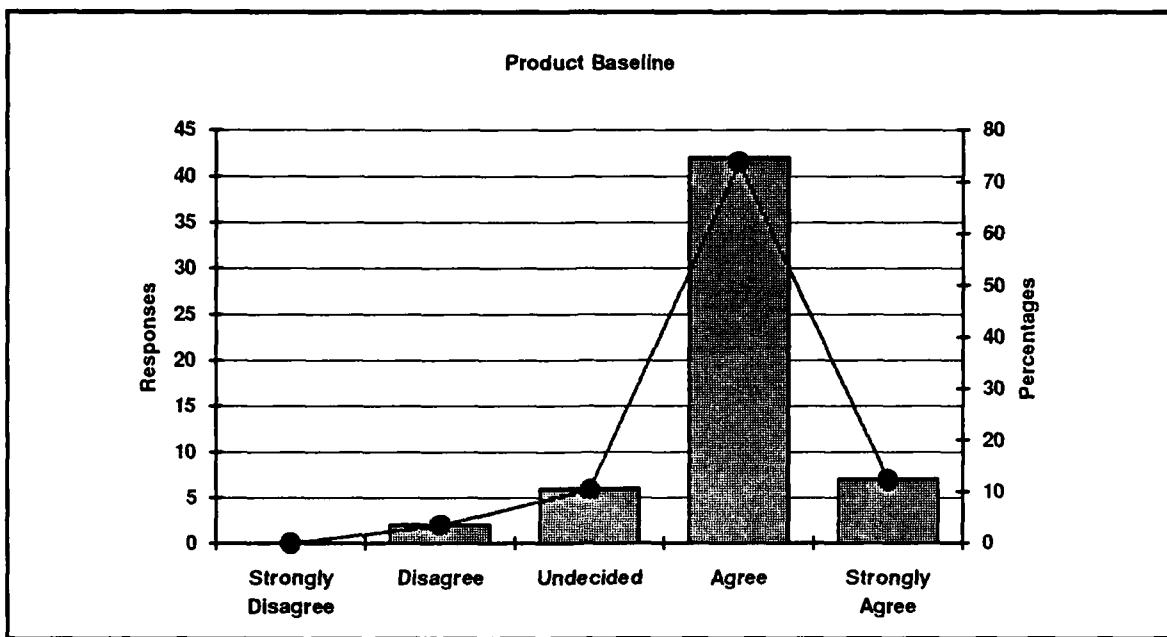


Figure 4-46. Product Baseline Survey Results

unmarked. Of the 78, 6 indicated they were "Undecided" and 21 were "Unfamiliar with Term." Based on the foregoing, approximately 42% ((10+6+21)/88) of the respondents did not have an opinion on the definition. This high rate of "no opinion" may indicate the term is not frequently used by the Certified Professional Contracting Managers (CPCMs) who comprised the survey's population. This term is primarily used in the Configuration Management community which may explain the high number of "Unmarked," "Undecided" and "Unfamiliar with Term" responses.

The two respondents who disagreed with this definition, commented,

- Product baseline may not be established prior to start of the production phase. That event is the ideal. This is particularly true if the program has a low rate initial production phase or government testing has not been completed by production start.
- The baseline is defined by Engineering Drawings, not system performance requirements.

The second sentence now begins with the word "Normally" to satisfy the first respondent's criticism. However, the researchers believe the proposed wording concerning the "system performance requirements" is correct and did not yield to the second respondent's comments. The

final definition also incorporates a suggestion made by a third respondent who proposed replacing the words "as a set" in the second sentence with "establishes a set". The final proposed definition is:

### **Product Baseline**

The third of the three baselines generally considered in Configuration Management. The other two are functional and allocated baselines. The PRODUCT BASELINE, created prior to the commencement of production, establishes a set of minimum system performance requirements that must be met by the system in production in order to satisfy the specified system operational requirements. This baseline is the basis for control during the production and operational periods.

Synonyms: None.

Antonyms: None.

### **13. Product Substitution**

Attempts by contractors to deliver to the Government goods or services which do not conform to contract requirements while seeking reimbursement based upon delivery of allegedly conforming products or services. If the contractor delivers a nonconforming good or service, the contractor must advise the Government of the fact to prevent product substitution from occurring.

Examples of conditions under which product substitution may be alleged to occur include: 1) substitution of another item for a contractually required item; 2) replacement of a domestic required item with an item from a foreign source; 3) replacement of a contractually specified skilled worker with a lower skilled worker; 4) nonperformance of contractually required tests or situations where such tests are not performed as prescribed; and, 5) submission of contractually required reports containing incomplete, inadequate, or false material by a contractor.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

A majority, 69.6%, of the respondents agreed with the above definition. Most of the comments offered questioned the second paragraph. Two people said the definition was too long.

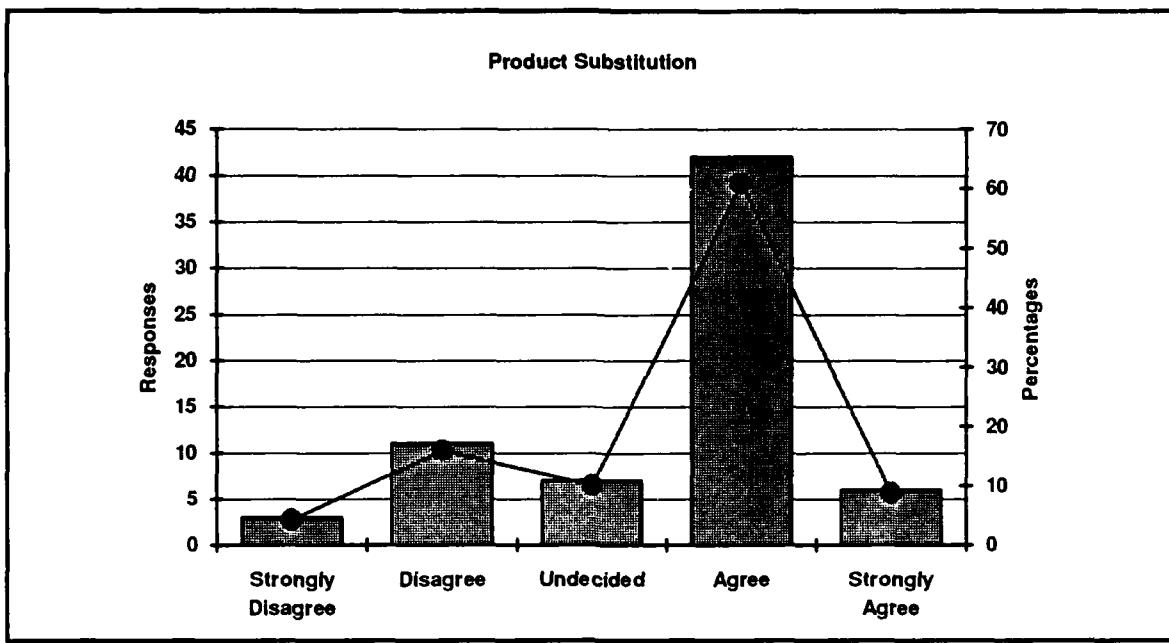


Figure 4-47. Product Substitution Survey Results

One suggested dropping the last paragraph. Another eight respondents questioned at least one of the examples given. Therefore, the second paragraph will be eliminated from the final definition.

The researchers agree with the individual who advised elimination of the first four words of the definition and replacing the word "deliver" with the word "Delivery". However, the researchers did not agree with the suggestion to replace the word "do" with the word "may" in the first sentence. The final proposed definition is:

### **Product Substitution**

**Delivery to the Government of goods or services which do not conform to contract requirements, while seeking reimbursement based upon delivery of allegedly conforming products or services. If the contractor delivers a nonconforming good or service, the contractor must advise the Government of the fact to prevent product substitution from occurring.**

Synonyms: None.

Antonyms: None.

### **14. Progress Payment Inventory**

That property acquired by the contractor to which the Government has a vested interest solely through FAR 52.232-16, Progress Payment Clause provisions.

Synonyms: None.

Antonyms: None.

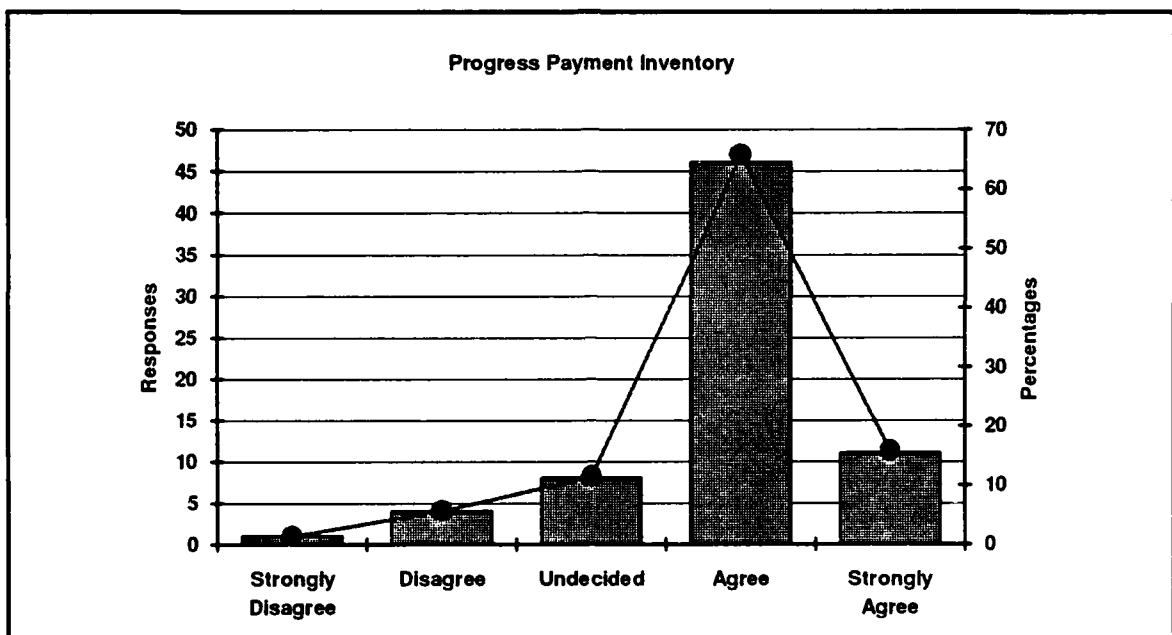


Figure 4-48. Progress Payment Inventory Survey Results

Analysis of survey responses yielded the following results:

The above definition of PROGRESS PAYMENT INVENTORY reached a consensus rating of 81.4%, calculated in accordance with the Chapter III methodology. Of the 88 individuals who responded to the survey overall 9 left the Likert Scale unmarked and 9 marked "Unfamiliar with Tenn."

One individual recommended adding the words "under a specific contract" between the words "contractor" and "to." The researchers partially agree with this recommendation since a contractor may purchase property outside a government contract. The final proposed definition will state "under a government contract."

Two respondents questioned the use of this term at all. One stated "This is creating a definition where one did not previously exist." The second asked, "Why is this term necessary?" When this was brought to the attention of the advisors, the researchers were instructed to provide a

synthesized definition for Progress Payment Inventory since there is evidence to indicate the term is being used, therefore, it should be included in the final proposed list.

Several respondents made comments concerning the FAR 52.232.16 reference. Three people questioned if the FAR reference was the only reference. One of them referenced DFAR 252.232-7007. However, the researchers did an On-Line search and could not find this reference in the DFARS. Therefore, it will not be incorporated in the final definition. Another respondent suggested deleting the FAR reference and replacing it with "the Progress Payment Clause provisions in the extant contract." While the researchers believe the FAR reference is beneficial to the definition, the final definition will use a modified version of the suggestion.

One individual commented, "You need to make very clear that 'property' as used in this definition means something different than the word usually does. See 52.232-16(d)(2)." This is a valid suggestion. A second sentence will be added stating that property will be defined as those items as specifically mentioned FAR 52.232-16(d)(2). The Progress Payment Inventory definition will not include the FAR 52.232-16(d)(2) property definition because of its length. The final proposed definition is:

### **Progress Payment Inventory**

That property acquired by the contractor under a government contract to which the Government has a vested interest through the Progress Payment Clause provisions (FAR 52.232-16) in the contract. Property, for the purposes of this definition, is that property as defined in FAR 52.232-16(d)(2).

Synonyms: None.

Antonyms: None.

### **15. Property Administrator**

An authorized representative of the Contracting Officer (CO) assigned to administer contract requirements and obligations relating to Government property.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

A total of 86.7% of our respondents, excluding the ten individuals who left the Likert Scale unmarked and the three who marked "Unfamiliar with Term," agreed with the proposed synthesized definition.

Five people commented that this term is also applicable to contractor personnel. According to the FAR, this term pertains to the government PROPERTY ADMINISTRATOR and not to the contractor's representative. However, it is possible that private industry also uses this term, therefore, the respondents' suggested usage has been incorporated in the final proposed definition.

Another respondent recommended replacing the phrase "an authorized representative" with "a warranted representative". Still another stated that some PROPERTY ADMINISTRATORS are warranted. However, the researchers believe the correct wording is "authorized" because a PROPERTY ADMINISTRATOR is issued a delegation of authority and not a warrant. The final proposed definition is:

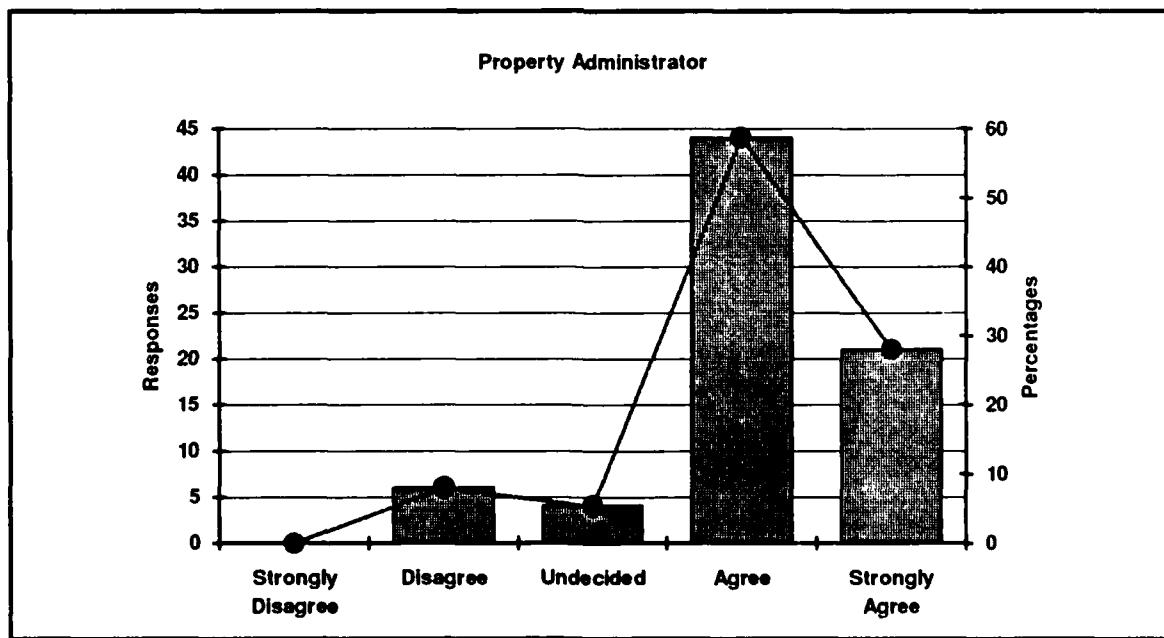


Figure 4-49. Property Administrator Survey Results

## **Property Administrator**

1. In the Government, an authorized representative of the government Contracting Officer (CO) assigned to administer contract requirements and obligations relating to Government property.
2. In private industry, a contractor may use this term for an individual who, although not specifically authorized by a Contracting Officer, performs property-related administrative functions for the company.

Synonyms: None.

Antonyms: None.

## **16. Provisioning**

The process of determining and acquiring the range and quantity of spare and repair parts, special tools, test equipment, and support equipment necessary to operate, support, and maintain an end item of material for a set period of service. Its phases include the identification of items of supply; the establishment of data for catalog, technical manual and allowance list preparation; and, the preparation of instructions to assure delivery of necessary support items with related end articles.

- The PROVISIONING process begins at the time a production contract is awarded for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.
- Specific types of PROVISIONING are: initial provisioning, follow-on provisioning, and reprovisioning. Initial provisioning is the first time provisioning for a new end item. Follow-on provisioning is a subsequent provisioning of the same end item from the same contractor. Reprovisioning is a subsequent provisioning of the same end item from a different contractor.
- PROVISIONING normally does not include the acquisition of support items for replenishment purposes or for augmentation of existing stocks of items already established in the wholesale supply system.

Synonyms: Outfitting.

Antonyms: Replenishment of Spares.

Analysis of survey responses yielded the following results:

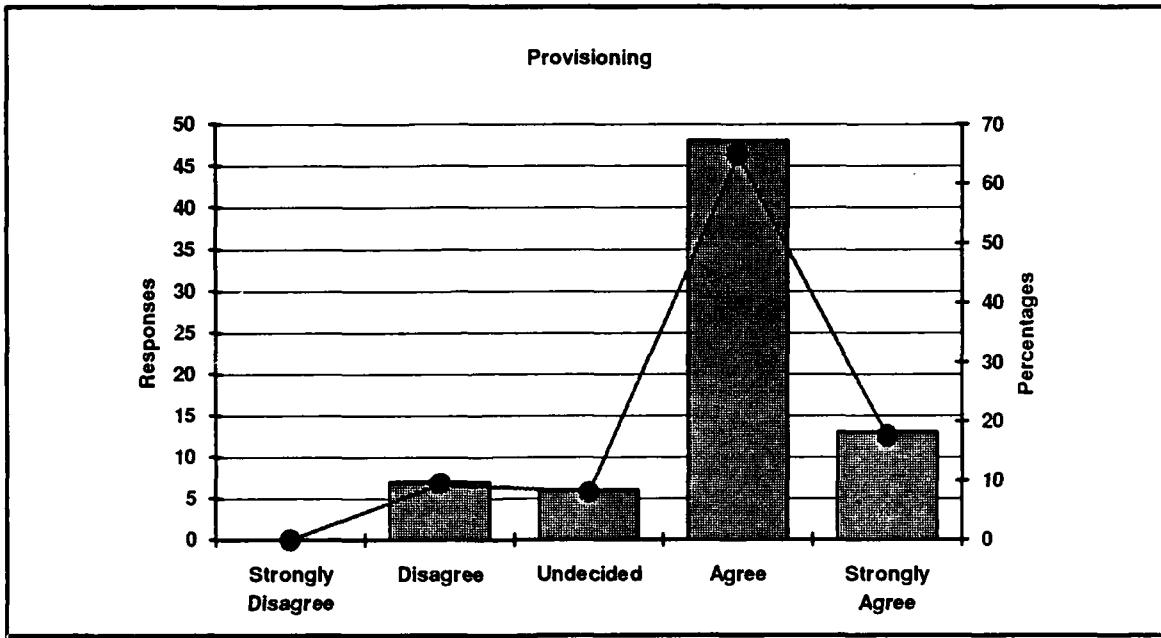


Figure 4-50. Provisioning Survey Results

A majority (82.4%) of the survey respondents agreed with this definition. Some of the comments include:

1. If one waits until the production contract is awarded that's too late, particularly if the government wishes to acquire initial spares with production. I consider the PROVISIONING process to begin in FSD as part of logistic support analysis and during formulation of the program support concept.
2. PROVISIONING may start before the production contract, maybe sooner in some cases.
3. Reference paragraph 1: Doesn't the PROVISIONING process begin in the requirements analysis phase? That is one of the areas required to be covered in the Integrated Logistics Support Plan.
4. Paragraph 1: Replace "awarded" with "planned".
5. The process begins before the award of a production contract (during the planning stage).
6. You have mixed "a definition" with how and when PROVISIONING works - is to be used, etc. Definition should be much shorter. First paragraph standing alone seem to be fine. Also, I am not experienced in this area at all. Delete 1, 2, and 3 which seems to describe the term as opposed to just defining it.
7. Cut off definition after first sentence.

8. This is the most well written definition so far in the set.
9. Paragraph 2 last sentence should say: "Reprovisioning is a subsequent PROVISIONING of the same end item from the same or different contractor that has proven that his item meets all requirements of the original accepted end item."
10. I would change "material" to "military hardware".
11. Basic issues in PROVISIONING are maintainability and reliability.
12. Antonyms: Replenishment of Spares is not an Antonym.

The first five respondents commented, as listed above, that the PROVISIONING process starts before contract award. The final definition replaces the word "awarded" with "planned" in the first Sub ¶.

The eighth comment strongly contradicts the sixth and seventh comments. The researchers agree that this is a long definition, but they believe it gives the reader important and useful information as it is written. Thus, the final definition will not be shortened.

The final definition will not be changed due to suggestions made in the ninth through eleventh comments since the researchers do not agree with these specific suggestions. Replenishment of spares will be deleted as a antonym based on the last comment. The final proposed definition is:

### **Provisioning**

The process of determining and acquiring the range and quantity of spare and repair parts, special tools, test equipment, and support equipment necessary to operate, support, and maintain an end item of material for a set period of service. Its phases include the identification of items of supply; the establishment of data for catalog, technical manual and allowance list preparation; and, the preparation of instructions to assure delivery of necessary support items with related end articles.

- The PROVISIONING process begins at the time a production contract is planned for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.

- Specific types of PROVISIONING are; initial provisioning, follow-on provisioning, and reprovisioning. Initial provisioning is the first time provisioning for a new end item. Follow-on provisioning is a subsequent provisioning of the same end item from the same contractor. Reprovisioning is a subsequent PROVISIONING of the same end item from a different contractor.
- PROVISIONING normally does not include the acquisition of support items for replenishment purposes or for augmentation of existing stocks of items already established in the wholesale supply system.

Synonyms: Outfitting.

Antonyms: None.

## **17. Rights In Technical Data**

There are three basic types of rights which apply to technical data delivered under contract to the government. See Unlimited Rights, Limited Rights, and Government Purpose License Rights.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

Although this definition exceeded the level of responses required to achieve a consensus, with 75.8% of our respondents marking "Agree" or "Strongly Agree" (excluding the nine who left the Likert Scale unmarked and the two who marked "Unfamiliar with Term"), fifteen respondents felt the definition should be expanded. One respondent suggest making the following change.

Replace definition with: "The body of rules, derived from statutes and regulations that are legally enforceable between the parties to a contract pertaining to technical data delivered under a contract. These rights are classified as Unlimited Rights, and Limited Rights".

The researchers agree with using the respondent's first sentence in the final definition. However, they believe "Government Purpose License Rights (GPLR)" should still be classified as another type of RIGHTS IN TECHNICAL DATA. Two other people pointed out that "Restricted Rights" in software should be included as a classification of yet another type of RIGHTS IN TECHNICAL DATA.

The researchers concur. Therefore, the last sentence now states; "These rights are classified as

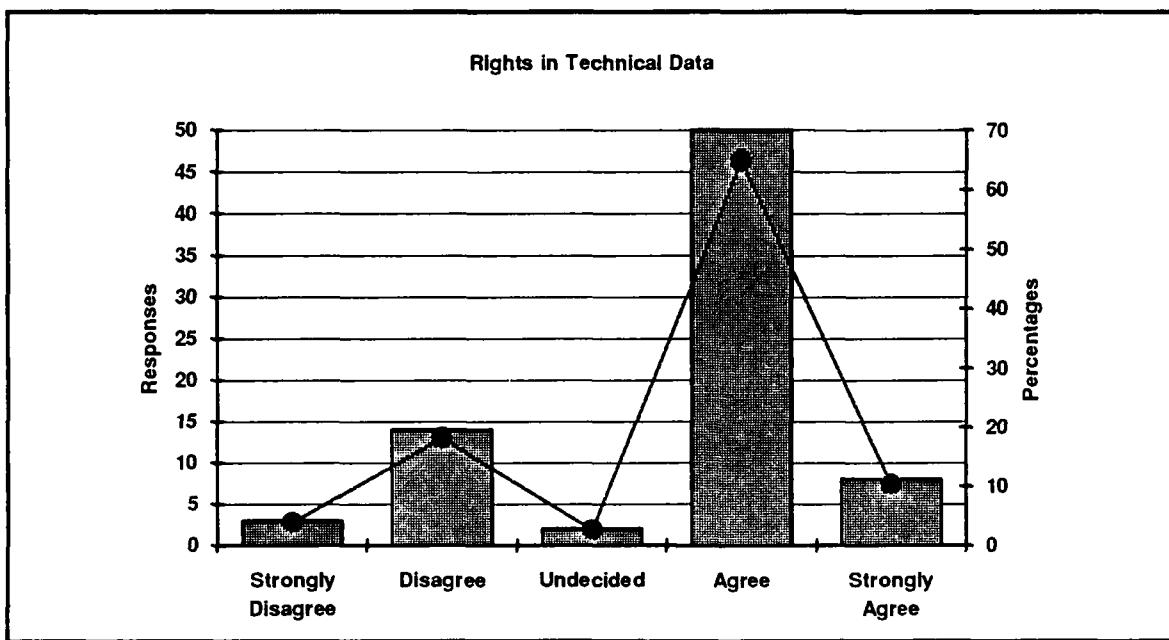


Figure 4-51. Rights in Technical Data Survey Results

Unlimited Rights, Limited Rights, Government Purpose License Rights, and Restricted Rights."

The final proposed definition is:

### **Rights In Technical Data**

The body of rules, derived from statutes and regulations that are legally enforceable between the parties to a contract pertaining to technical data delivered under a contract. These rights are classified as government purpose license rights, limited rights, restricted rights, and unlimited rights.

Synonyms: None.

Antonyms: None.

### **18. Risk Analysis**

An examination of risk areas or events to determine options and the probable consequences for each event in the analysis. Such areas can be computed using complex models, expert opinions, or intuitive judgment.

Synonyms: None.

Antonyms: None.

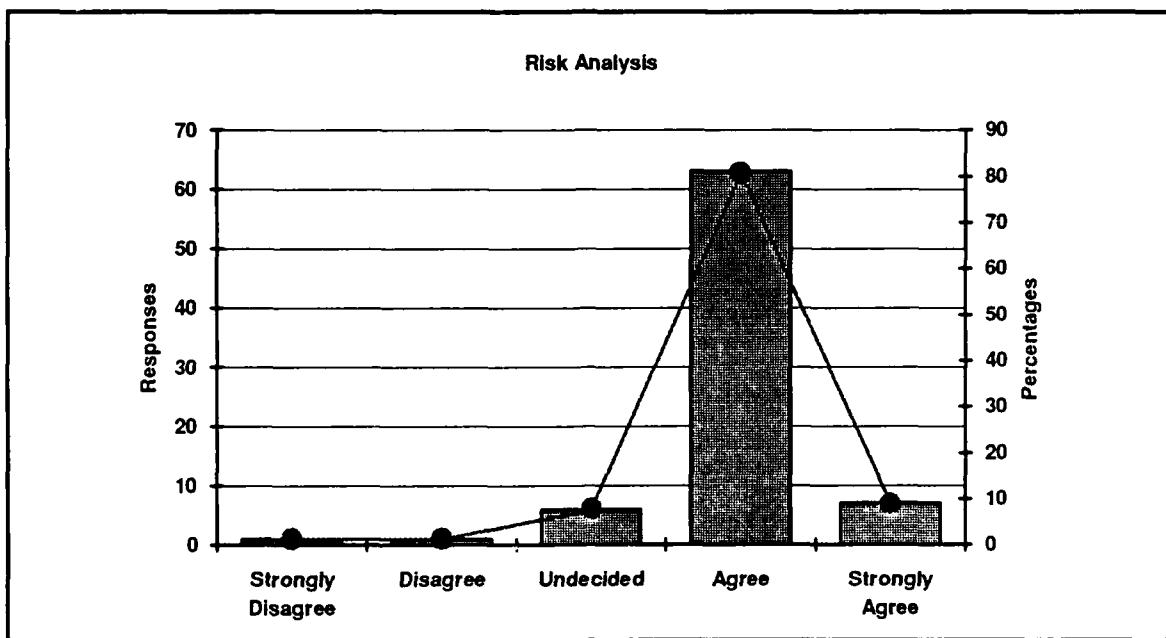


Figure 4-52. Risk Analysis Survey Results

Analysis of survey responses yielded the following results:

A sizable majority, 89.7%, of the survey respondents agreed with the proposed synthesized definition. Respondent's suggestions include:

- First sentence between "each" and "event" add "area or" and delete "in the analysis". Second sentence between "areas" and "can" add "or events".
- You compute area by taking length times width! Suggest this wording: "Such areas or events can be analyzed by using complex ..."
- Second sentence replace "computed" with "analyzed".

The above comments are the "replace this with that" variety. The researchers have modified the proposed definition, based on the above comments, where appropriate. The final proposed definition is:

### Risk Analysis

An examination of risk areas or events to determine options and the probable consequences for each area or event. Such areas or events can be analyzed using complex models, expert opinions, or intuitive judgment.

Synonyms: None.

Antonyms: None.

## 19. Risk Management

The organized process of planning, identifying, and measuring risks; then developing, selecting, and managing options for resolving these risks. Risk drivers such as technical, supportability, programmatic, cost, and schedule factors should be considered and managed at all phases of a system's life cycle.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

A majority, 88.5%, of the respondents, calculated as set forth in Chapter III, agreed with the above definition for RISK MANAGEMENT. Several suggestions were received for improving the definition. These are listed below:

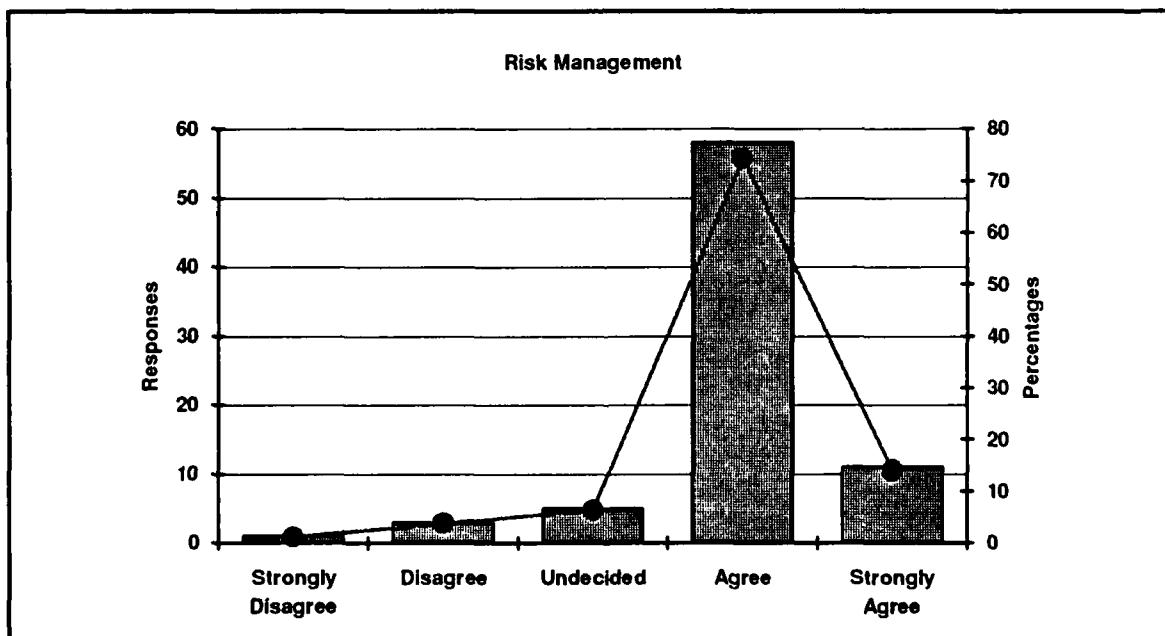


Figure 4-53. Risk Management Survey Results

1. Risks are identified and managed but not necessarily resolved. The goal to resolve them - only to judge and track to lessen possible impact.
2. Risk cannot be "resolved", only managed.

3. First sentence between "for and these" take out "resolving" and replace with "mitigating".
4. Many risks can not be resolved. That's why you have RISK MANAGEMENT. Suggest this wording - Delete "resolving these risk" and replace with "selecting, and managing options to bring these risks into acceptable limits".
5. Suggestion: RISK MANAGEMENT begins in the proposal preparation phase and continues on thru delivery.
6. First sentence: Add "controlling".
7. Second sentence is good, but, is it really a part of the definition? "Risk drivers" indicate when/how "RISK MANAGEMENT" is implemented or "turned on".

The first four comments argue that some risks cannot be resolved. The researchers concur with this reasoning and have modified the first sentence of the definition based on the suggestion in the third comment. The researchers disagree with the fifth comment. RISK MANAGEMENT should start before proposal preparation.

The sixth comment suggests adding the word "controlling" to the first sentence. However, some risks cannot be resolved or controlled. Therefore, this suggestion will not be incorporated into the final definition. The seventh suggested deleting the second sentence. However, the researchers believe the "risk driver" concept tells the reader what issues/drivers RISK MANAGEMENT considers. Thus, this concept is considered to be important and has been retained in the final definition. The final proposed definition is:

### **Risk Management**

The organized process of planning, identifying, and measuring risks; then developing, selecting, and managing options for mitigating these risks. Risk drivers such as technical, supportability, programmatic, cost, and schedule factors should be considered and managed at all phases of a system's life cycle.

Synonyms: None.

Antonyms: None.

## 20. Rule 4 File

A file containing all pertinent information in a dispute including: the Contracting Officer's (CO) final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Board of Contract Appeals (BCA). The Rule 4 procedure pertains only to BCA appeals and not to litigation before the U.S. Claims Court. The CO is required, within 30 days of receipt of the complaint (appeal), to assemble and distribute the RULE 4 FILE to the BCA and the contractor. The contractor has the opportunity to supplement the file within 30 days of its receipt. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings. Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. The RULE 4 FILE is also called the appeal file or the protest file in protests before the General Services Administration Board of Contract Appeals (GSBCA).

Synonyms: Appeal File, Protest File, Discovery.

Antonyms: None.

Analysis of survey responses yielded the following results:

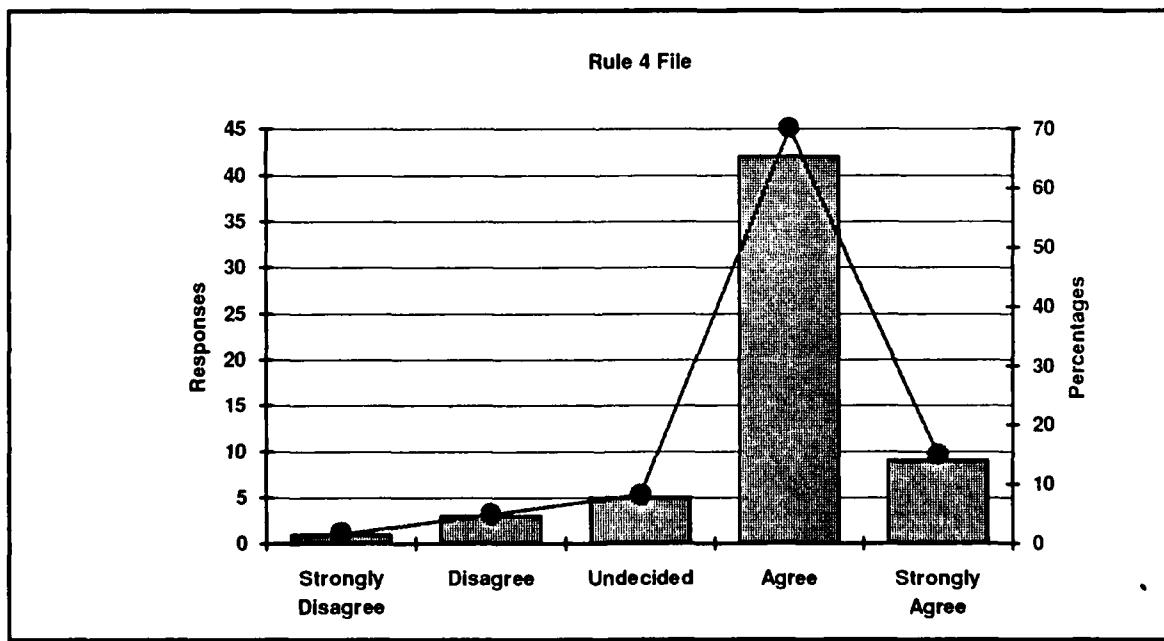


Figure 4-54. Rule 4 File Survey Results

Again, a majority, 85.0% of the 60 CPCMs who provided a response to this term (calculated in accordance with the methodology described in Chapter III), agreed with the definition. It is noted that a significant minority (37.5% of the total of 88 who responded to the survey as a whole) expressed no opinion, either because they left it blank (8), they were undecided (5) or they indicated they were "Unfamiliar with Term" (20). It is hoped that the somewhat high percentage of respondents with no opinion on this particular definition are reflective of a relatively low level of litigation involving RULE 4 FILES overall. Comments included:

1. The term "File" is a very broad term. Suggest some form of qualification, such as "Dispute File," "Approval File," or "RULE 4 FILE."
2. The word "file", first sentence - dossier, folder, place, etc. File means much more than papers for a DCA claim.
3. Wouldn't the term "File" apply in a broader context. May not be limited to dispute. May want to change definition to read "Dispute File". Maybe "Rule 4" means dispute?
4. Change "U.S. Claims Court" to "U.S. Court of Federal Claims."
5. But U.S. Claims Court has had its name changed to the Court of Federal Claims.
6. Too long. First sentence, standing alone, seems to define "RULE 4 FILE". The rest of the paragraph is very helpful and pertinent information; but (it seems to me) describes "RULE 4 FILE" in detail as opposed to just defining it. Also, I am inexperienced in this area of contracting (so far). Maybe I am lucky!!!
7. No, I think a RULE 4 FILE and a protest file are two different things, having been through both. It's unwise to confuse them. Synonyms: Take out "Protest" and "Discovery".

The first three comments deal with the use of the word "file" in the first sentence. They argue that "a file" contains more information than is in a "RULE 4 FILE". However, the first sentence explains the information contained in the RULE 4 FILE, thereby satisfying the intent of their logic. Therefore, the first sentence has not been changed.

The fourth and fifth comments stated that the U.S. Claims Court changed its name to the Court of Federal Claims. This is true and the final definition will reflect this change. The sixth

comment expresses the opinion that the definition is too long and only the first sentence be included in the definition. The researches believe the information contained within the definition is pertinent and it has been retained in the final definition.

The seventh comment stated that a "protest file" and a RULE 4 FILE are not synonyms. This may or may not be true depending on the forum. To avoid confusion, the list of synonyms will be deleted but, the last sentence will remain intact. The final proposed definition is:

#### **Rule 4 File**

A file containing all pertinent information in a dispute including: the Contracting Officer's (CO) final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Board of Contract Appeals (BCA). The Rule 4 procedure pertains only to BCA appeals and not to litigation before the Court of Federal Claims. The CO is required, within 30 days of receipt of the complaint (appeal), to assemble and distribute the RULE 4 FILE to the BCA and the contractor. The contractor has the opportunity to supplement the file within 30 days of its receipt. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings. Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. The RULE 4 FILE is also called the appeal file or the protest file in protests before the General Services Administration Board of Contract Appeals (GSBCA).

Synonyms: None.

Antonyms: None.

#### **21. Section 8(a) Contract**

A contractual arrangement, under section 8(a) of the Small Business Act, 15 U.S.C. 637(a), wherein the Small Business Administration (SBA) is authorized to enter into contracts with government procuring agencies and to award subcontracts for performing those contracts to firms eligible for 8(a) program participation. The arrangement may also take the form of a tripartite agreement among the above parties to provide required supplies or services to the Government. An 8(a) contract may not be awarded if the price of the contract results in a cost to the contracting agency which exceeds its fair market value.

Synonyms: 8(a) Contract.

Antonyms: None.

Analysis of survey responses yielded the following results:

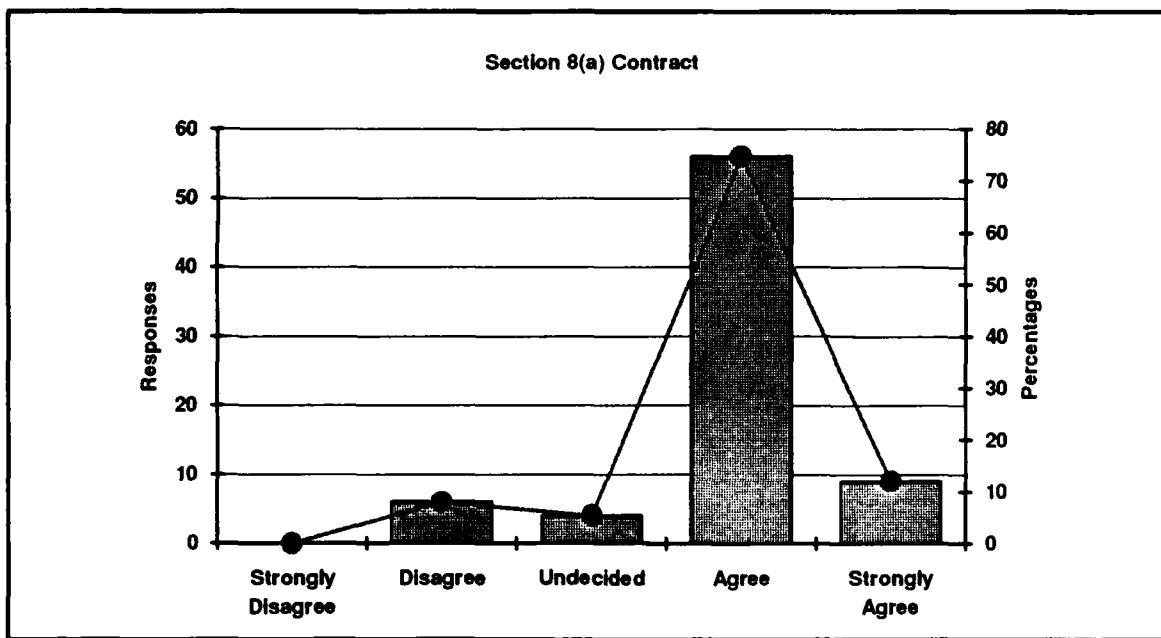


Figure 4-55. Section 8(a) Contract Survey Results

A majority, 86.7%, of the respondents agreed with the definition. Only two people indicated they were "Unfamiliar with Tenn" and eleven left the Likert Scale unmarked. Several of the comments received are listed below:

1. Last sentence - Not necessarily true - SBA can make up the difference with Business Development funds (In Theory). In Actuality, SBA never has any Business Development Funds.
2. I'm not sure about the last sentence. If that is correct, then I strongly agree.
3. However, no one really believes in the last sentence - Why not be honest and strike it?
4. The last sentence is almost ignored completely.
5. Delete last sentence.

6. Fair market value - subjective. Can normally beat an 8(a) price if go open market or to a large business.
7. Delete last sentence and replace with "Contract must be at a fair and reasonable price to the Government".
8. First sentence - between "arrangement" and "under" insert (tripartite agreement). After "contracts" take out "with" and replace with "to provide required supplies or services to". Then delete second sentence.
9. Second sentence -take out "may also" and add an "s" after "take".
10. Should the general criteria for inclusion in the 8(a) program be included?
11. Should include definition of 8(a) requirements.
12. No mention that an 8(a) is a small disadvantaged business program. Need more definition/explanation.
13. Why not leave this out until we find out if tripartite agreements become a thing of the past.

The first seven comments recommended that the last sentence in the proposed definition be deleted. In addition, comments eight and nine advocate grammatical changes to the definitions. The researchers agree with both categories of comments. Comments ten through twelve suggested that the general criteria for inclusion in the 8(a) program be included in the definition. The general criteria has been defined, by Spalding and Cushing, under the term "Small and Disadvantaged Business Concern." (61:4-70). A duplication of effort would occur if the general criteria of the 8(a) program is defined under this term and under "Small and Disadvantaged Business Concern". Further, stating the criteria requires a long and technical definition of a "Small and Disadvantaged Business Concern". The purpose of this term is to define a SECTION 8(A) CONTRACT and not what constitutes a "Small and Disadvantaged Business Concern".

Finally, comment thirteen suggests eliminating the concept "tripartite agreements" since this type of agreement, according to the respondent, may be discontinued. The researchers are not aware of any immediate plans to discontinue this type of agreement and have left this concept in the final definition. The final proposed definition is:

## **Section 8(a) Contract**

A contractual arrangement (tripartite agreement), under section 8(a) of the Small Business Act, 15 U.S.C. 637(a), wherein the Small Business Administration (SBA) is authorized to enter into contracts to provide required supplies or services to government procuring agencies and to award subcontracts for performing those contracts to firms eligible for 8(a) program participation.

Synonyms: 8(a) Contract.

Antonyms: None.

## **22. Single Source**

The only known source able to perform a contract, or the one source among others that, for justifiable reason, is judged to be most advantageous to the Government for the purpose of contract award. A sole or SINGLE SOURCE acquisition means a contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source.

Synonyms: Sole Source.

Antonyms: Competition, Competitive Acquisition.

Analysis of survey responses yielded the following results:

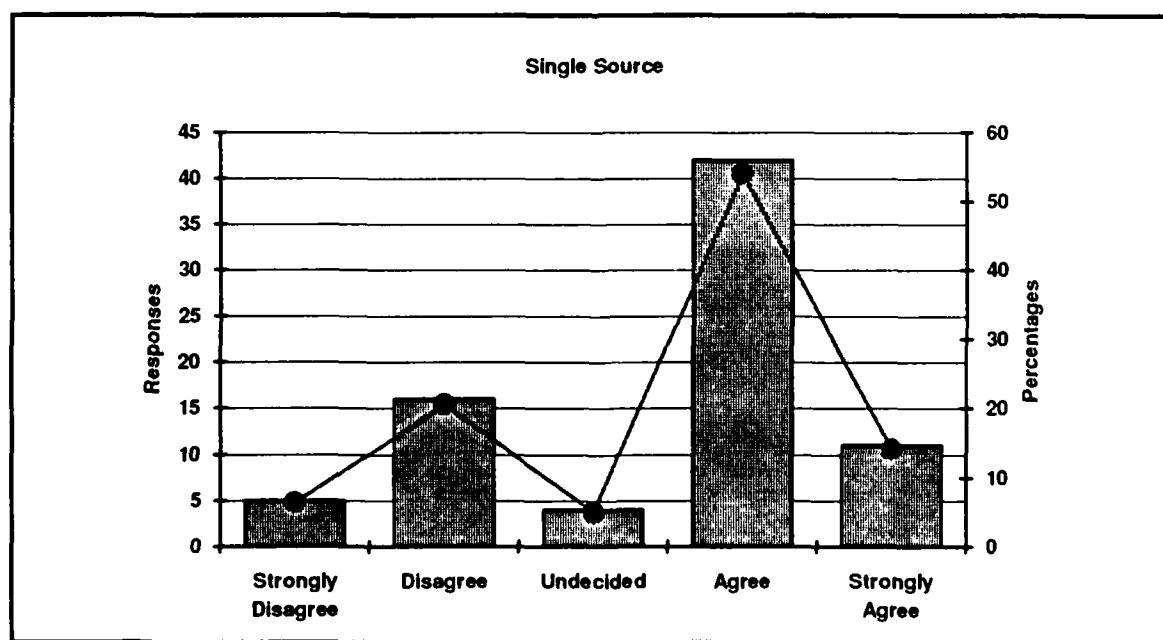


Figure 4-56. Single Source Survey Results

A majority, 67.9%, of the respondents agreed with the definition of SINGLE SOURCE. Of the 88 respondents on Survey B, ten people left the Likert Scale unmarked and no one marked "Unfamiliar with Term." Most of the comments (18) were based on the inference in the definition that SINGLE SOURCE and "sole source" are synonymous. According to one respondent: "A SINGLE SOURCE means only one source was solicited. A "sole source" means only once source has the capacity to perform under the terms and conditions of the instant contract." The researchers agree that "sole source" and SINGLE SOURCE are not synonymous and all references concerning "sole source" should be excluded from the final definition. This includes deleting the first part of the first sentence since it also infers "sole source."

One person felt that the definition should list the allowable justifications or reasons for going with a SINGLE SOURCE. The researchers do not believe listing the reasons for going SINGLE SOURCE should be a part of the definition. These reasons may change over time. Also, the intent is to define SINGLE SOURCE, no to list all the circumstances under which the use of a SINGLE SOURCE may be permissible.

A few respondents suggested making grammatical changes, however, these suggestions are no longer relevant due to the above-mentioned changes. The final proposed definition is:

### **Single Source**

The one source among others, that, for justifiable reason, is judged to be most advantageous to the Government for the purpose of contract award. A SINGLE SOURCE acquisition means a contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source.

Synonyms: None.

Antonyms: Competition, Competitive Acquisition.

### **23. Substantial Performance**

A doctrine that recognizes the contractor's performance when slight, trivial, or minor deviations from the terms of an agreement occur. The Government shall pay the contractor the amount obligated under contract, less damages which result from any deviation from the promised performance. The Government is

prohibited from terminating the contract for default if substantial performance exists. Three conditions must be present in order to conform with the substantial performance doctrine. First, the contractor must have made a good faith attempt to perform to the contract requirements. Second, results of the contractor's endeavor must be beneficial to the government. Finally, benefits must be retained by the government.

Synonyms: Substantial Compliance, Substantial Completion.

Antonyms: None.

Analysis of survey responses yielded the following results:

A majority (86.7%) of the respondents agreed with the definitions. Comments received include:

1. I don't think this goes far enough. These conditions could be met and the product delivered could still be far short of what would constitute substantial performance.
2. Don't understand why the last two sentences are stand alone points.

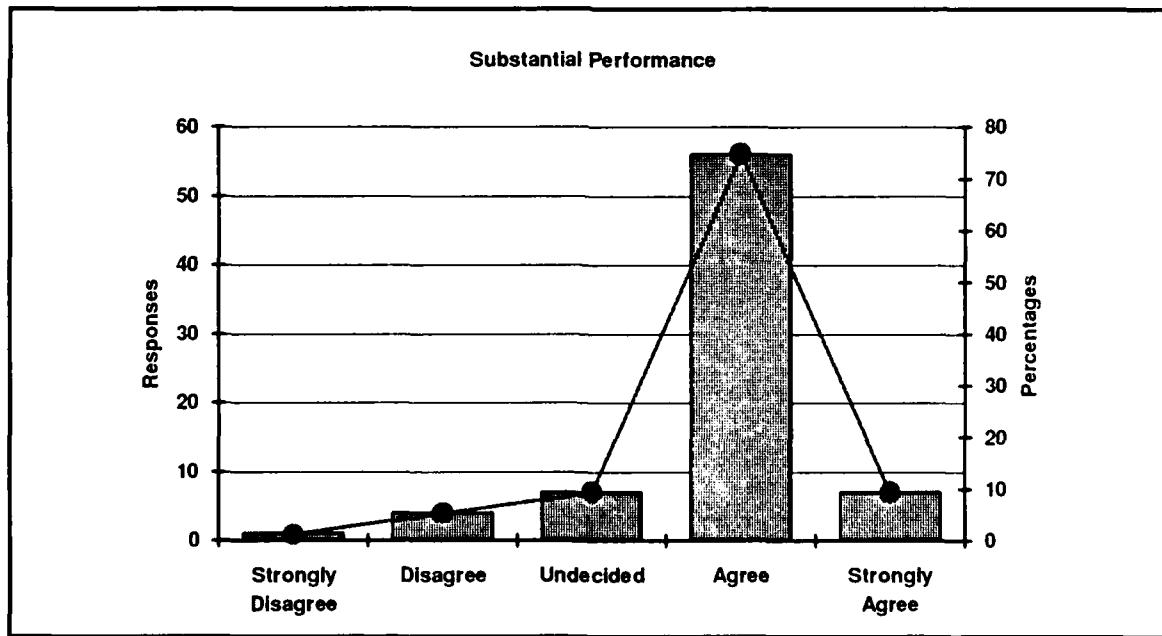


Figure 4-57. Substantial Performance Survey Results

3. Based on second to last sentence, who determines "beneficial to the government"?
4. What if the Government wants repairs or corrections. The term "shall" does not permit these options. I agree the Government can't terminate for default, but they don't have to pay and deduct damages.

5. Add: Most commonly found in construction contracts.
6. **SUBSTANTIAL PERFORMANCE** is fact-based. An attempt to define it may be very difficult.
7. Refer to FAR, case law.
8. Should consider UCC for commercial contracts.

The first comment indicates that other conditions are needed for **SUBSTANTIAL PERFORMANCE** to occur. However, the respondent did not state what the other conditions are. The researchers could not find any other condition needed to prove **SUBSTANTIAL PERFORMANCE**. Further, no other survey respondent suggested that any condition is missing. Therefore, the conditions will not be changed due to the first comment. In contrast, the second respondent questioned the whether the last two conditions are needed to prove substantial performance. Again, the researcher's review indicated the three conditions must be met and no one else questioned the last two conditions.

Comment three asks the question; "Who determines 'beneficial to the government'?" Ultimately, the courts will determined this question as well as all of the other facts in a case. Comment three's question will not be addressed in the final definition.

The government has a legal right to demand the contractor to perform according to the contract. However, this right is not based on the **SUBSTANTIAL PERFORMANCE** doctrine. The **SUBSTANTIAL PERFORMANCE** doctrine is a defense the contractor uses to prevent being terminated for default and to prevent another party from being unjustly enriched. Therefore, the fourth comment is not applicable when defining **SUBSTANTIAL PERFORMANCE**.

Comment five is true and has been incorporated in the definition. The researchers agree with comment six that this term was difficult to define. In response to comments seven and eight, the researchers considered FAR, case law, and the Uniform Commercial Code (UCC) when they developed this definition. **SUBSTANTIAL PERFORMANCE** applies to both government and commercial contracts. The final definition is:

## **Substantial Performance**

A doctrine, usually applied to construction contracts, that recognizes the contractor's performance when slight, trivial, or minor deviations from the terms of an agreement occur. The Government pays the contractor the amount obligated under the contract, less damages which result from any deviation from promised performance. The Government is prohibited from terminating the contract for default if substantial performance exists. Three conditions must be present in order to conform with the SUBSTANTIAL PERFORMANCE doctrine. First, the contractor must have made a good faith attempt to perform to the contract requirements. Second, results of the contractor's endeavor must be beneficial to the government. Finally, benefits must be retained by the government.

Synonyms: Substantial Compliance, Substantial Completion.

Antonyms: None.

## **24. System Specification Baseline**

A baseline, more commonly known as the functional baseline, agreed upon by the contractor and the government that establishes the system level specification which defines a system's technical, performance, design, or mission requirements.

Synonyms: Functional Baseline.

Antonyms: None.

Analysis of survey responses yielded the following results:

A majority (89.7%) of the survey respondents agreed with the proposed definition.

Comments include:

1. Synonyms: Preliminary Baseline. System Specification Baseline should follow the Critical Design Review.
2. May be augmented with Interface and Test Specifications.
3. Eliminate. Functional Baseline should remain only accepted name. Do not allow for alternative.
4. Do not recommend two definitions for same purpose. Suggest the definition for Functional baseline be called "systems specification" or that the Functional definition is sometimes called a System Specification definition.

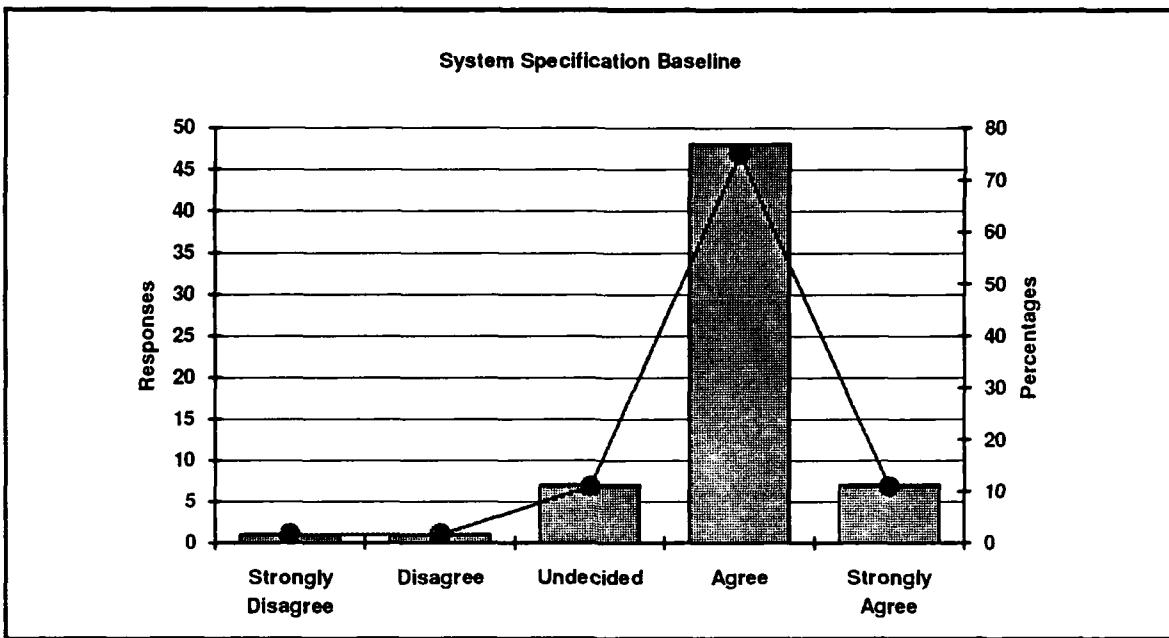


Figure 4-58. System Specification Baseline Survey Results

The first respondent wrote that "preliminary baseline" should be added as a synonym. The second respondent commented the system specification baseline may be augmented with Interface and Test Specifications. The researchers do not have enough information to conclusively determine if these comments are valid. Therefore, these recommendations will not be included into the final definition. The last two comments suggested deleting this term altogether. However, the researchers were instructed by Dr. William C. Pursch to develop this definition as explained on page 2-82. Hence, we are required to include this term in the master listing of terms. The final proposed definition is.

### **System Specification Baseline**

A baseline, more commonly known as the functional baseline, agreed upon by the contractor and the government that establishes the system level specification which defines a system's technical, performance, design, or mission requirements.

Synonyms: Functional Baseline.

Antonyms: None.

## 25. Unpriced

A term used to denote an action that requests or commits the contractor to provide an item or service, but does not, at the time of issuance, establish a definite price for that item or service. Examples of unpriced actions include letter contracts, undefinitized contractual actions, and unpriced purchase orders.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

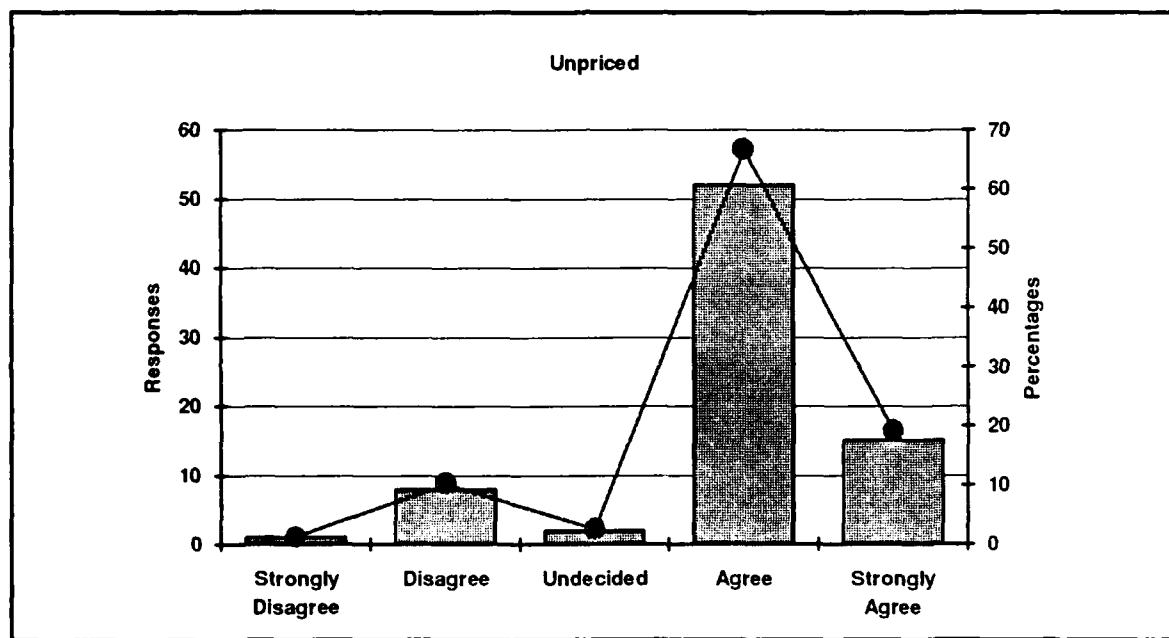


Figure 4-59. Unpriced Survey Results

A majority (89.7%) of the survey respondents agreed with the proposed definition. Respondents suggestions include:

1. It seems as if the definition should include a reference that the action must establish a ceiling or Not-to-Exceed (NTE) price until the action is finalized.
2. Should at least have an NTE price. I do not feel a contractor should be required to provide anything if an NTE has not been provided for subsequent negotiation.
3. Your definition needs to be expanded to indicate that the UNPRICED ACTION must have a NTE/Ceiling price which at worst case scenario becomes the

definite price for the item or service. A common misconception is that UNPRICED ACTIONS are totally unbounded. Adding in the NTE/Ceiling price limitation helps refute this misconception.

4. Add NTE discussion.
5. There should be some mention of a ceiling price or time limit in which a price is established.
6. Mention ceiling.
7. Need some reference to NTE.
8. But may establish a not-to-exceed price.
9. First sentence: Take out "but" and replace with "at a not-to-exceed price that".
10. Change term from "UNPRICED" to "UNPRICED ACTION".
11. "UNPRICED" should not require a stand alone definition. When used in conjunction with other words, i.e. UCA, then a definition is required.
12. Question on Term Unpriced What? Need an object. UNPRICED Contract/Order.
13. First sentence: replace the words "an action" with the words "a transaction".
14. First sentence: replaced "requests" with "directs".
15. Last sentence: Omit "purchase orders" and replace with "options". I've never heard of an "UNPRICED PO" unless you mean one for a repair where you specify a "not to exceed" amount. PO's are supposed to be fixed price and I would not want to imply that they often are not.
16. Last sentence: Omit "contractual action" and replace with "contract modifications (both unilateral and bilateral)".
17. Add "provisioned item orders changes issued unilaterally".
18. Last sentence: insert "change orders".

The first nine comments suggested adding a reference that an UNPRICED ACTION should establish a ceiling or Not-to-Exceed (NTE) price. The researchers agree. The final definition will include another sentence stating; "An UNPRICED CONTRACTUAL ACTION establishes a ceiling or Not-to-Exceed (NTE) price until the price is definitized."

Comments ten, eleven, and twelve suggest changing the name of the term. The researchers agree that the term should be changed from UNPRICED to UNPRICED CONTRACTUAL ACTION, since they have been unable to identify an UNPRICED ACTION in Government acquisition that is not contractual in nature. The final definition will incorporate the changes recommended in comments thirteen and fourteen.

Comments fifteen through eighteen questioned the examples given in the proposed definition. Respondent fifteen questioned the use of the term "UNPRICED Purchase Order" (UPO). The literature review, page 2-83, indicated that the FAR uses this term, therefore, the final definition will also use it as an example. The last three comments wanted to add examples. The intent of providing examples was to provide the reader of a better understanding of the UNPRICED concept. The intent was not to provide an all inclusive list of examples. Therefore, the last sentence has been changed to incorporate the phrase "include, but are not limited to." The final proposed definition of UNPRICED CONTRACTUAL ACTION is:

### **Unpriced Contractual Action**

A term used to denote an action that requests or commits the contractor to provide an item or service, but does not, at the time of issuance, establish a definite price for that item or service. An unpriced action establishes a ceiling or Not-to-Exceed (NTE) price until the final price is definitized. Examples of UNPRICED CONTRACTUAL ACTIONS include, but are not limited to, letter contracts and unpriced purchase orders.

Synonyms: None.

Antonyms: None.

## **26. Work Measurement Standards**

A method for evaluating efficiency by defining typical or "standard" hours to perform a task and comparing them to actual time used. The comparisons are used to compute efficiency and performance or realization factors. The term "standard", in work measurement, is applied to any established or accepted rule, model, or criterion against which comparisons are made.

Labor time standards are composed of the time allowed for a normally skilled worker following a prescribed method and working at a normal all-day level of

effort, to complete a defined task with acceptable quality plus allowances. Allowances include time for personal time, fatigue, and minor, unavoidable, and unpredictable delays that are not under the worker's control. MIL-STD-1567A recognizes two types of work measurement standards:

- Type I (Engineered) standards are established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard.
- Type II (Estimated or Non-Engineered) standards are those not meeting the criteria for Type I and are usually determined by estimates based on experience or historical data.

Synonyms: None.

Antonyms: None.

Analysis of survey responses yielded the following results:

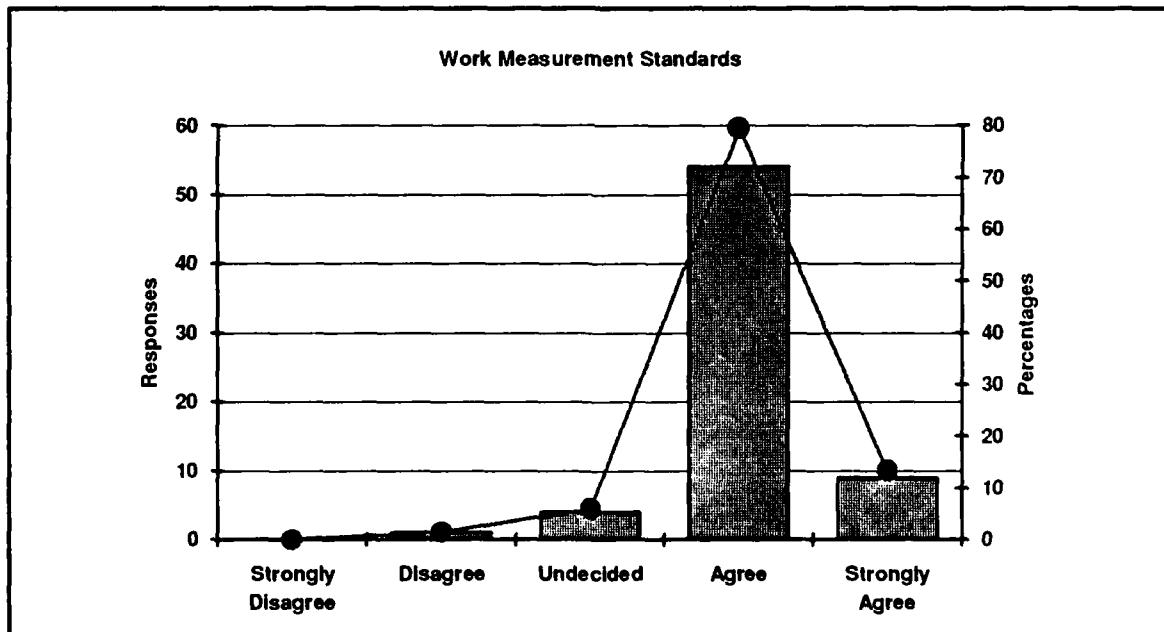


Figure 4-60. Work Measurement Standards Survey Results

A majority (92.6%) of the survey respondents agreed with the proposed definition. Seven people indicated that they were unfamiliar with the term and thirteen left the Likert scale unmarked.

Two people said that DoD is canceling WORK MEASUREMENT STANDARDS (MIL-STD-1567A). This may or may not be true for new acquisitions, however the use of WORK

**MEASUREMENT STANDARDS** is still a requirement on many current programs. Consequently, this term is still in use and remains on the list of final proposed definitions.

Two people commented that they felt the proposed synthesized definition for the term is too long. One of them recommended only including the first paragraph. The researchers believe the information included within the second paragraph is pertinent. Therefore, the second paragraph remains in the final proposed definition which is set forth below:

### **Work Measurement Standards**

A method for evaluating efficiency by defining typical or "standard" hours to perform a task and comparing them to actual time used. The comparisons are used to compute efficiency and performance or realization factors. The term "standard", in work measurement, is applied to any established or accepted rule, model, or criterion against which comparisons are made.

Labor time standards are composed of the time allowed for a normally skilled worker following a prescribed method and working at a normal all-day level of effort, to complete a defined task with acceptable quality plus allowances. Allowances include time for personal time, fatigue, and minor, unavoidable, and unpredictable delays that are not under the worker's control. MIL-STD-1567A recognizes two types of work measurement standards:

- Type I (Engineered) standards are established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard.
- Type II (Estimated or Non-Engineered) standards are those not meeting the criteria for Type I and are usually determined by estimates based on experience or historical data.

Synonyms: None.

Antonyms: None.

## **G. Summary**

Chapters I, II and III discussed the background of the current research effort, summarized the literature review and defined the methodology used. Chapter IV provides an overview of the results of the mail survey, including demographics, analyses of the comments received and appropriate revisions to the definitions. Chapter V, which follows, enumerates and elaborates on the researchers' conclusions and recommendations.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **A. Summary**

This chapter summarizes the conclusions and recommendations drawn from the conduct of the research described above. The goal of this thesis effort, as well as the entire "definitions project," described in Chapter I, was to develop consensus definitions suitable for publication in a future NCMA sponsored dictionary.

The effort for this particular thesis was initially concentrated on the last fifty-three terms found on the Master List of contracting terms maintained by Dr. William C. Pursch and Dr. David V. Lamm. These were researched during an extensive literature review, synthesized into literature-based definitions, proposed to and validated by a randomly selected group of recognized experts in the field of contracting, and revised accordingly. For the reasons discussed in Chapters II and IV, some of the original terms were deleted and others added. At the high point, fifty-eight terms, many of which have multiple definitions, were researched. By the end, definitions of fifty-two terms reached or exceeded the level of consensus described in the predetermined methodology detailed in Chapter III and are recommended for inclusion on the Final Master List. Based on the foregoing, each of the final definitions is considered reasonably comprehensive and acceptable in relation to its current usage in the field of contracting, more broadly identified as the acquisition community.

Earlier researchers in this project, Spalding and Cushing, noted that there is no single comprehensive source for all of the terms being defined in their study (61:5-5). This is equally true of the terms researched for this thesis effort. Some of the terms were found in the FAR and its supplements; some were found in OMB A-109 and its implementing documents in the DoD 5000 Series; some were found in category-specific literature, such as books and texts related to manufacturing or articles and papers discussing the international aspects of contracting; and some

were found only by scouring reference works and dictionaries and interviewing knowledgeable professionals. No single publication or person addressed all of them.

The comments and conclusions listed below will address the inclusion of the final proposed definitions into a professional dictionary of contracting terms. The recommendations section suggests additional areas of research which the researchers believe could prove fruitful to future Master's candidates interested in this type of study.

## B. Specific Recommendations

The following actions are recommended with regard to terms found in Survey A.

Based on respondents' comments, there is a possibility that the term CONTRACT ADVISORY AND ASSISTANCE SERVICES (CAAS) will be obsolete in the relatively near future, "due to re-examination of the term." Since this is a possibility, it is suggested that its usage be validated one last time prior to final publication in the proposed NCMA sponsored dictionary.

One of the "sub-definitions" under the umbrella term, DOCUMENTATION, was for the "sub-term" TECHNICAL DOCUMENTATION. Respondents were unhappy with the definition provided, but they failed to offer any concrete suggestions as to how it should be rewritten to make it clearer and more meaningful. The current researchers believe that, in view of the comments received, future researchers might find unambiguous definition of this "sub-term" a productive endeavor.

Based on post-survey review of the information found in the FAR and its supplements and the DoD 5000 series and its related regulations resulting from comments by Survey A respondents, it is recommended that the definition for FULL-SCALE ENGINEERING DEVELOPMENT (FSED) be split into two parts. One part should retain this title to recognize its basis in the FAR and the other should be titled, "ENGINEERING AND MANUFACTURING DEVELOPMENT (EMD)," to acknowledge current terminology as discussed in Chapter 4 and as implemented in the list of final proposed definitions.

With regard to Survey B terms, the following actions are recommended:

During the literature review for the term PRUDENT BUSINESS PERSON, it was discovered that the term "prudent businessman concept" had previously been researched and validated using the consensus method described in this thesis. It was felt that providing a synthesized definition of the term PRUDENT BUSINESS PERSON would not contribute any value to this thesis effort since it was duplicative of earlier research. Therefore, it is recommended that:

- the term PRUDENT BUSINESS PERSON be deleted from the Master Listing; and
- the previous synthesized term "prudent businessman concept" be changed to read "prudent business person concept." This last change would make the term gender neutral.

As mentioned in Chapter IV, the researchers for this thesis learned late in the process that a special federal committee had been appointed to rewrite FAR 45. The resulting product is expected to include a new "official" definition of the terms CONTRACTOR INVENTORY, OTHER PLANT EQUIPMENT (OPE), and INDUSTRIAL PLANT EQUIPMENT (IPE), which are terms researched in Survey B whose definitions are derived in large part from the information in this part of the FAR. It is possible that either or both the meanings and/or the names of these terms may change significantly once the revision is issued. Consequently, it is recommended that the FAR Committee review the survey results for INDUSTRIAL PLANT EQUIPMENT and OTHER PLANT EQUIPMENT when rewriting FAR 45. CONTRACTOR INVENTORY has been deleted from the final proposed definition listing due to the low rate of consensus (47.3%) derived from analysis of responses from survey participants. As stated in Chapter III, each definition must receive a 66% rate of consensus in order for the definition to be acceptable.

The researchers also learned during the data analysis phase that WORK MEASUREMENT STANDARDS (WMS) requirements will be deleted from future DoD contracts. However, the determination to do so may change or be modified before implementation. Therefore, although it is still being used on old contracts and still being talked about on occasion, it is recommended that this definition be deleted from the final proposed definition list and further research be conducted to

determine if it will, in fact, be canceled, modified, or a new system will take the place of the current WORK MEASUREMENT STANDARDS as contained in MIL-STD-1567A before including it or its successor term in the proposed dictionary.

Various survey respondents suggested the title or name of the term UNPRICED be changed. The researchers believe this change is merited since the single word term UNPRICED was not found during the literature review. The researchers recommend changing UNPRICED to UNPRICED CONTRACTUAL ACTION based on the survey comments and the literature review.

The following recommendations are made in regard to previous recommendations and to possibly outdated definitions in older theses:

This thesis is currently scheduled to be the last of a continuing series providing definitions validated by the scientific method of research for future editions of the NCMA sponsored dictionary. However, it and several previous theses have recommendations that have not been fully resolved. It is our understanding that students at the Naval Postgraduate School have undertaken the effort to "settle," to the degree possible, all outstanding recommendations and to resurvey questionable definitions from older theses to determine if the terms and definitions are still valid.

### C. General Comments

Daniel L. Downs made a comment that rang true for this thesis as well, in his Master's Thesis, *A Dictionary of Acquisition and Contracting Terms*, December 1989. Downs indicated that sole reliance on the researcher's judgment and discretion could be construed as a weakness of the procedure followed to obtain consensus on synthesized definitions. He questioned the proper course to follow when, "a respondent would recommend a change to a synthesized definition which contributed to a more concise definition, while a majority of respondents agreed with the synthesized definition" (26:56).

The present researchers also ran into this situation. It was their feeling that the respondents were fully qualified to pass judgment and provide constructive suggestions when there was a

clearer way of phrasing a given definition, or when there was a need to bring a literary definition into line with an operational meaning. Indeed, the qualifications of the survey population were a primary reason for their selection as participants in this effort. Where there was a common thread among the comments received or where a suggested rephrasing was clearly more lucid and comprehensible than the original synthesized definition, the researchers deferred to the superior knowledge of the respondents.

Several respondents "hammered" at what they perceived as the researcher's military and/or government bent or bias. Other earlier researchers have commented on the potential for bias inherent in the methodology established for this project. Randall G. Indvik concluded, "The methodology used in this thesis has the potential to allow a considerable amount of researcher bias to enter the researcher effort" (36:114).

The current researchers cannot argue the point. Many of the terms defined in this effort were related to major systems acquisition by the Government. While there might be differing usages of the same terminology in the commercial context, they were not immediately apparent to the researchers from the literature review. The researchers made a conscientious effort to use a literature base that would reflect both Government and private sector applications and practices; however, the overwhelming majority of the sources that contained these particular terms were aimed toward either government or military contracting practices and usages. The synthesized definitions were based entirely on definitions or passages in those published sources found during the literature review and listed in the bibliography.

Indvik further pointed out that, "The occurrence of such bias appears probable when one considers the environment in which the research is carried out" (36:115). Indeed, the entire NCMA dictionary project has been performed by military and civilian members of the Department of Defense (DoD) acquisition workforce, however many of the respondents were employed in commercial industry or state and local public service or civilian agencies and they made it clear

when our biases overstepped their limitations or there was a different interpretation possible. It is our opinion that the very nature of the researchers' experience as Government contracting professionals is bound to influence their perceptions of the various ways a term is or can be used and it is also apparent that the judgment of a researcher is an integral part of the definition process. However, some of the contextual comments received from our counterparts were valid expressions of differing viewpoints.

The current researchers tried to address this perceived weakness by using the following procedure. Where there is clearly more than one use for a particular term and it is supportable by additional review of the literature, the researchers recognized the additional meaning by incorporating it into the definition. In most cases this involved separating the governmental component from the commercial component and annotating the definition to make it clear which was which. However, there were instances where the literature did not support a proposed change in phraseology or in meaning and, therefore, the definition was not revised.

A number of the terms defined in this thesis effort, are not necessarily an everyday part of the terminology ordinarily employed in a strictly generic contracting function. They are related to the government acquisition process as a whole and used in many cases more frequently by other acquisition professionals such as Program Managers, Property Managers, Financial Managers, etc. In today's dynamic atmosphere with its emphasis on downsizing and team building, each individual needs to be conversant with commonly used words and catch phrases of the other. All participants need to understand and to be clearly understood to enable accurate and effective communication between members of different disciplines in the acquisition community. An acquisition-related dictionary, providing operational as well as literature-based definitions, validated by experts, is considered essential to the maintenance and enhancement of our professional body of knowledge. If, by using such a tool, we can reach a mutual understanding the first time we speak and each time thereafter, miscommunication (with its attendant characteristics of waste in terms of time lost,

money spent on the wrong things and diminished ability to fulfill mission needs) will find it much more difficult to rear its ugly head.

#### **D. General Recommendations**

Laureli M. Moyle aptly stated, "As the nation's economy, budget, technology base and political influences change so does the phraseology of the acquisition world" (47:6-7). The researchers note that early in this research effort, over six hundred additional literature-based, acquisition-related terms were identified in the NCMA's *Desktop Guide* (see Appendix G, "List of Additional Unresearched Terms" for the complete listing). The definitions of these additional terms, have not, to our knowledge been subjected to the rigors of the scientific research method of achieving consensus. These terms, as well as others which enter the common vernacular of government contracting as a result of the dynamic nature of the acquisition environment, could well serve as the basis for additional research at a later date. Their inclusion in later editions of the NCMA sponsored dictionary would be a welcome adjunct to those already researched.

#### **E. Conclusion**

Understanding exactly what is needed, what is being offered to satisfy that need, and how they interrelate is fundamental to the acquisition process. So is recognition of the interdisciplinary nature of the contracting function. A broad background and sound sources, containing useful information, are essential to effective participation in and management of acquisition-related activities. This research effort was started with the intention of making communications between contracting and acquisition professionals more effective and intelligible by reducing ambiguities and standardizing commonly used terminology.

This continuing research project has been sponsored by the NCMA over the years. It has been performed by Master's candidates at the Naval Postgraduate School and the Air Force Institute of Technology, starting in 1987, with Connie L. Thornton's Master's Thesis, *Contracting: A Systematic Body of Knowledge*. One of the concerns Thornton documented was the difficulty of

achieving consensus on terminology because of individual perceptions of the procurement process. She felt that the establishment of uniform definitions of procurement terminology that could be standardized throughout the contracting discipline were essential to establishment of the definitive body of knowledge considered necessary for a truly professional contracting discipline (63:99). The current researchers are confident that a well researched and validated dictionary, such as the one currently contemplated under the sponsorship of NCMA, is an important step in the right direction. This project provides a sound basis for the disciplined body of knowledge she envisioned in her thesis. That it has been validated by randomly selected contracting professionals over successive years, adds credence to the entire project. This thesis is intended to complete the research effort described herein.

## APPENDIX A

*Note: The following Methodology is quoted directly from Spalding and Cushing's Thesis, "Defining Contract Terms" (61:3-2 to 3-14), with the exception of the items in brackets which were added by the current researchers to denote specific clarifying changes or to denote that they had, in fact, examined specific references independently as well. Therefore, it should be noted that the citation numbers listed in parentheses do not apply to the present thesis. This (Appendix A) is presented to provide the reader insight into and rationale for use of the current methodology.*

### III. METHODOLOGY

Chapter I identified three investigative questions, enumerated below. The development of answers to these questions guided this thesis effort. The manner in which the answers are developed constitutes the methodology of this research.

#### **Investigative Questions**

For each of fifty-one contracting terms addressed by this effort, the following questions must be answered:

1. What are the current definitions of this term in the existing literature?
2. Are the definitions found in various sources consistent? Are they complementary? Are there conflicts among published definitions? Is more than one meaning supported by existing literature?
3. Are the published definitions consistent with operational definitions currently in use?

The approach to be implemented in answering the investigative questions posed above can be summarized under the steps listed below. It is emphasized that this approach is *qualitative* in nature. Although some quantitative techniques are used, in development of the appropriate sample size, for example, language, which is the essence of this research, cannot be reduced to mathematics. As will be emphasized in the discussion of decision rules for data analysis which will

follow, the researchers' judgment, based on a combined experience of thirty years in various contracting functions, supersedes any number-based criterion for decisions.

The first step in the execution of the proposed research effort (which, when completed, answers investigative questions 1. and 2.) is the development of the synthesized definition(s) for each term. This step is accomplished through a review and exegesis of the existing contracting literature. Where multiple sources offer the same or very similar definitions for a particular term, the level of agreement among published definitions will be considered high. In that event, the analysis associated with development of the synthesized definition(s) will be limited to ensuring that the selected published definition or researcher-produced composite is clear, complete, and concise. When a higher level of variation among published sources is noted, development of synthesized definitions will require a more critical analysis. In that case, the synthesized definition will be based on more extensive research into the term's background, as well as the researchers' judgment based on experience in the contracting field. An additional objective of the literature review is to identify other terms which can be used interchangeably with the subject term (synonyms), and terms which have the opposite meaning (antonyms).

Once the synthesized definitions have been developed the next step in the research effort is to assess the level of agreement, or consensus, within the professional community regarding the synthesized definition(s) of each term, and to adjust the proposed definitions as necessary to increase the level of agreement to an acceptable percentage. ("Acceptable" is more precisely defined below.) This is accomplished (and investigative question 3 is answered) through a combination of (a) a mail survey administered to recognized contracting professionals, and (b) application of a modified Delphi approach [described later] to the results of the initial mailing.

### **Survey Method**

A mail survey was selected as the appropriate vehicle for submission of the synthesized definitions to contracting professionals for their review and evaluation. This format has several significant advantages over the other available alternatives (personal interviews or a telephone

survey). While personal interviews offer the advantages of a high response rate and the ability to obtain detailed information, there are several drawbacks. The cost in administrative time is such that only a relatively small number of persons would be sampled. Additionally, restrictions on funds, as well as time, would require that the sample be taken from only a few localities, at most. A third consideration is that in order for useful, quality responses to be obtained, it is necessary that the respondents read the proposed definitions carefully and thoughtfully. It is suggested that a one-on-one interview does not offer the environment most conducive to that process, since the respondent might be distracted by the interviewer or feel pressured to rush through his analysis rather than take up more of the interviewer's time. Finally, it seems apparent that the best (i.e., most complete and well-reasoned) results on the survey will be achieved when the respondent is able to complete the survey at a time most convenient for him or her. Unfortunately, a personal interview, although carefully scheduled is often not really convenient for the interviewee.

The telephone interview offers the advantages of a high response rate and a very quick turnaround time. However, the primary drawbacks to this vehicle parallel those for the personal interview. Specifically, the cost in administrative time is prohibitive; restrictions on time would dictate that the number of contacts be fairly small. Perhaps most importantly, however, is the difficulty associated with conveying the synthesized definitions, some of which are quite lengthy, to the respondents telephonically. To be analyzed competently, the definitions must be *read*, as opposed to *heard*. Additionally, a well thought response is generally not compatible with a telephone survey, where the object is often to obtain a response "off the top of" the interviewee's head. Thus, as with personal interviews, the telephone survey does not offer the environment most conducive to the thought processes that will yield, for our purposes, a quality response.

A mail survey has not been selected for this research "by default". On the contrary, [this] method offers distinct advantages, given our emphasis on the need for respondents to see and read the synthesized definitions, and have adequate time to reflect on them, at a time convenient to the respondents, as well as the very definite limits on the researchers' time. The mail survey can meet

all those criteria. Previously, the main drawbacks associated with mail surveys were a low response rate and a relatively slow turnaround time. In fact, past thesis students working on this dictionary project who used mail surveys reported response rates as low as 14% (25:3-4). However, the Dillman technique (taken from his book, *Mail and Telephone Surveys: The Total Design Method* [25]) incorporated by Moyle [47] and Shelley [59] resulted in very high response rates to their surveys (25:5-2; 30:35-36). (The Dillman technique is discussed below in more detail.) The relatively longer time it takes to receive responses to mail surveys was considered in developing the timeline for this thesis effort. Based on the foregoing, the mail survey was determined to be most appropriate, considering the circumstances of the research effort.

#### *The Dillman Technique.*

Simply stated, the Dillman technique is a process used to increase the rate of response to mail surveys by: (a) convincing potential respondents that the purpose of the study is worthwhile, and that their response is important; and (b) issuing repeated reminders to nonrespondents appealing for their participation in the study. As Moyle [47] points out, the *Total Design Method* (TDM) developed by Dillman is flexible (25:3-5). Per Dillman [25], if the TDM is followed "in complete detail", the response rate will be around 77%, and use of a tailored version will yield a response of about 71% (14:21). Since the 71% rate is more than adequate for purposes of this study, an abbreviated form of the Dillman Technique will be applied.

In order to accomplish the first step of his technique, Dillman suggests use of a survey cover letter which will convey the purpose of the questionnaire, the usefulness of the study with which it is associated, the importance of the recipient's responses to the success of the study, and the confidential nature of the information to be provided (14:165-170). The cover letters attached to each of the two surveys sent out as part of this research were written with Dillman's advice in mind. . .

Dillman [25] suggests that the repeated reminders to nonrespondents be accomplished in the following manner:

Exactly 1 week [after the initial mailing] a postcard follow-up is sent to all recipients of the first mailing. Preprinted, but with an individually typed name and address on one side and an individually applied signature on the other, the note on this postcard is written as a thank you for those who have already returned their questionnaires, and a reminder to those who have not. A second follow-up is mailed to nonrespondents exactly three weeks after the original mailout. It consists of a cover letter that basically informs them that their questionnaire has not yet been received and includes a restatement of the basic appeals from the original cover letter, a replacement questionnaire, and another return envelope. The third and final follow-up is mailed 7 weeks after the original mailing. It consists of a cover letter and still another questionnaire and return envelope, and it is sent by certified mail to the remaining nonrespondents. (14:163)

For purposes of this study, the first follow-up was sent within two weeks of the initial mailing. The second follow-up was sent after four weeks. Based on the level of responses received after two mailings, no third follow-up was sent. The same procedures were applied to the survey sent out to those terms which did not generate consensus based on the results of the initial surveys. It should be noted that the researchers kept track of which potential respondents had replied by assigning each survey recipient a number, and annotating that number on the first page of that person's survey form...

### **Survey Population.**

Having decided upon a mail survey, the population and sample to whom the survey should be directed must be identified. The target population used by a number of past thesis students working on the dictionary project (including Moyle) was the NCMA Fellows. This group was selected because:

- 1) they are a representative body from government, industry, academia, and professional education; 2) they are diversely but highly educated; 3) they are considered experts in their field of interest; and 4) they are familiar with this ongoing research. (25:3-6)

As might be expected of such a distinguished group, the number of NCMA Fellows is fairly small (there were 600 in 1988) (17:23). Eventually, most or all of the Fellows had been surveyed in association with one of the dictionary theses. Rather than overburden the Fellows with renewed requests to complete dictionary-related surveys, thesis students working on this project began to

use Certified Professional Contracts Managers (CPCM's) as the target population. Shelley [59] was among the first to use this group (30:30). CPCM's are considered to be an appropriate population to survey based on their recognized contracting expertise, validated by their having met certain educational requirements and passed a rigorous professional examination administered by the NCMA.

### **Sample Size and Selection.**

A mailing list of CPCM's containing 4113 names was provided by the NCMA (26). The desired sample size was calculated using the following formula, implemented by Shelley [58], and taken from the *Guide for the Development of the Attitude and Opinion Survey* (30:31; 5:11-14):

$$n = \frac{N(z^2) * p(1-p)}{(N-1)(d^2) + [(z^2) * p(p-1)]} \quad \text{where:}$$

*n* = sample size

*N* = population size of 4113, less 148 names previously used by Shelly ( $4113 - 148 = 3965$ )

*p* = maximum sample size factor (.5)

*d* = desired interval range ( $\pm .10$ ); and

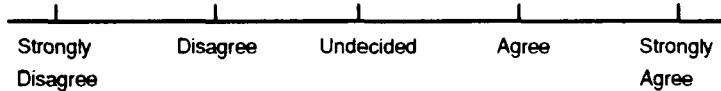
*z* = [1.645 at the] 90% confidence level for estimating intervals within which to expect the population proportion

The maximum sample size factor is as specified by Emory, in *Business Research Methods* (15:258). The *z* value is taken from the table of normal curve areas in *Statistics for Business and Economics* based on a subject decision to use a 90% confidence level (24:1173). The *d* value is a subjective decision. Solving for *n* yields a sample size of 67. Assuming a 50% response rate to the surveys will be achieved, 134 surveys must be sent in order to receive 67 responses. Based on a cursory review of the mailing list, which showed that, of those CPCM's known to the researchers, a surprising number were listed under incorrect addresses, the number of surveys to be sent was increased to 145.

Because of the large number of terms being addressed in this thesis, it was decided that asking individual respondents to evaluate all the definitions would be overly presumptuous. Therefore, two surveys, one addressing 25 terms and the other 26, were submitted to (different) random samples of 145 Certified Professional Contracting Managers (CPCM's). The recipients of the surveys were selected by generating 290 random numbers between 1 and 3965 (using [the Lotus 1-2-3®] random number generator), and taking the mailing labels from the (alphabetized) list based on their numerical position on the list in accordance with random numbers.

### **Survey Development.**

The survey instruments. . .present the synthesized definition(s) developed for each term, and ask the respondents to rate their agreement with the definition(s) on a Likert scale as shown below.



(Note that numerical values sometimes associated with the Likert scale are not included. This is in keeping with the qualitative nature of this research, as discussed above.) Additional comments are solicited, both in the instructions for completing the questionnaire, and by providing space for comments under each proposed definition's Likert scale. A minimal amount of demographic information (area of expertise, years of experience, etc.) is requested under the heading, "Background Information".

In keeping with the Dillman [25] technique, the questionnaire was arranged so that it was not necessary to turn the page in the middle of any question. Dillman points out that having to flip pages "makes the questionnaire less attractive to respondents", and can making answering the questions more difficult (14:144-146).

## **Analysis of Results.**

Before sending out the initial surveys, the researchers developed the following decision rules for use in analysis of the survey results. However, it should be reiterated that, because of the qualitative nature of this research, the researchers' judgment takes precedence over any number-based decision criterion (see decision rule 2, below).

### *Decision Rules:*

(1) If two thirds of the survey respondents agree with the proposed definition of a term, it will be accepted as the consensus definition. If fewer than two thirds agree, a modified Delphi approach (see below) will be pursued. ("Agree" means that a respondent has selected either "agree" or "strongly agree" on the Likert scale shown above.)

(2) If two thirds of the respondents agree with the proposed definition, but the minority makes a point that, in the researchers' opinion, is valid, the term will be subjected to a modified Delphi approach.

It is noted that the "two thirds" criterion marks a departure from the methodologies used by most of the previous researchers on the thesis project. In many instances, those students used 50% agreement as the criterion for deciding whether a synthesized definition could be accepted as proposed. For example, Moyle's [47] decision rule was as follows:

If 50% or more of the respondents agreed with the definition then the comments provided by those who disagreed with the description were incorporated only when: 1) similar comments were made by those who agreed, or 2) the recommended change was supported by the literature. (25:3-8)

In theory, if a 50% rule is used, a synthesized definition can be accepted as a consensus definition when *exactly* 50% of respondents agree, meaning that *exactly* 50% disagree, so that there is not consensus about the term, but rather, *complete lack* of agreement. Therefore, these researchers have elected to use a more conservative "two thirds" criterion.

### **Modified Delphi Approach.**

Since language consists of complex concepts, replete with subtleties and nuances, use of a Delphi approach, wherein experts reach agreement through an iterative, interactive process of discussion and evaluation, would fit very well with the goals of the dictionary project. However, time, funding, and unavailability of the appropriate experts for an extended time preclude the use of this technique in its full form. Nevertheless, the researchers have elected to incorporate a modified Delphi approach, compatible with the limitations of this study, into the process of analysis of responses. For those terms subject to continued analysis per the decision rules above, a second survey incorporating revised proposed definitions will be mailed to those who responded to the first survey (a smaller, but responsive, sample). The revisions to the initial synthesized definitions will be based on the suggestions and comments offered by all respondents (those who agreed with the first definition as well as those who did not) to the initial survey. Although time and funding will not permit enough iterations to achieve absolute agreement by all, this second survey is anticipated to result in an improved level of consensus. As before, if two thirds of respondents to this second survey agree with the proposed definition as revised, it will be accepted as a consensus definition. If less than two thirds agree with the revised version, the term will be recommended as the subject of further research in a later thesis.

## **Defining Acquisition Related Terms**

### **SURVEY A Table of Contents of Proposed Definitions**

Agency-Peculiar Property.....	2
Architect-Engineering (A&E) Contract .....	2
Co-development .....	3
Concept Exploration.....	3
Consent to Subcontract.....	4
Contract Advisory and Assistance Services (CAAS) .....	4
Cost/Schedule Control Systems Criteria (C/SCSC) .....	5
Economic Production Rate.....	5
Demonstration and Validation.....	6
Economic Purchase Quantity .....	6
Design/Technical Competition .....	7
Excess Reprocurement Costs.....	7
Documentation .....	8
Educational Service Agreement (ESA) .....	9
Fair and Equitable .....	9
Fair and Reasonable Price .....	10
Greatest Value .....	10
Full Scale Engineering Development.....	11
Government Furnished Information (GFI) .....	12
Pilot Production .....	12
License Agreement .....	13
Long-Term Contracting .....	14
Material Requirements Planning .....	15
Materiel Management.....	15
Non-Developmental Item (NDI).....	16

NOTE: The page numbers listed above are those contained in the survey as it was sent to the survey population. For the purposes of this thesis, all pages, including the cover letter and the instructions, have been renumbered with a "B.1" prefix to indicate they are part of Appendix B.1

## **Appendix B.1: Survey A**

**AFIT/LSP (Dr. Pursch)**

**Participation in Graduate Thesis Research**

**Dear Certified Professional Contracting Manager (CPCM):**

Under the sponsorship of the National Contract Management Association (NCMA), graduate students at the Air Force Institute of Technology (AFIT) and the Naval Postgraduate School (NPS) are attempting to compile a dictionary of contracting terms to be used to enhance effective communication within the contracting profession. Working definitions of critical terms have been developed based on a review of current contracting literature. However, actual usage of each term within the environment of the workplace cannot be determined through such a review. Therefore, a survey of contracting professionals is being undertaken in order to ascertain the degree to which literature-based definitions correspond with actual usage.

The enclosed survey is being distributed to a randomly selected group of CPCMs. You are being asked to respond by giving your expert opinion concerning the accuracy and completeness of selected literature-based definitions. Because the survey is being sent to a relatively small number of experts, it is important that each recipient complete and return it. Your participation is greatly encouraged.

Your responses to this survey will remain confidential. Each questionnaire has been assigned an identification number for mailing purposes. This will enable your name to be checked off when your questionnaire is returned. However, your name will not be associated with your responses.

For your convenience in returning the completed survey, a stamped, pre-addressed envelope is enclosed. Should you have any questions about the purpose or completion of the survey, please feel free to call Ms. Nancy Stormer at (513) 434-4216.

**Thank you for your assistance. Remember - your participation is important!**

**Sincerely,**

**WILLIAM C. PURSCH, Ph.D., CPCM  
Professor of Contracting Management  
School of Systems and Logistics**

**2 ATCH  
1. Questionnaire  
2. Envelope**

## **Survey A**

### **INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE**

This questionnaire contains proposed definitions of 25 contracting terms. The purpose of this questionnaire is to survey contracting professionals to ascertain the level of their concurrence with the proposed definitions.

To complete this questionnaire, please:

Circle the rating that best describes your level of agreement with the proposed definition; and

Provide any additional comments/suggestions you have regarding the proposed definition, as well as any synonyms or antonyms you feel are appropriate.

**PLEASE SUBMIT YOUR RESPONSES BY 16 APR 1993.**

Your assistance is appreciated.

Nancy Stormer  
AFIT/LAA  
2950 P Street  
Wright-Patterson AFB OH 45433-7765

### **Background Information**

1. Where are you presently employed?
  - A. Government contracting activity
  - B. Commercial contracting activity
  - C. Academic institution
  - D. Other
  
2. What is the primary activity of your current job position?
  - A. Contracting/acquisition
  - B. Manufacturing/production
  - C. Accounting/audit
  - D. Pricing
  - E. Engineering
  - F. Research
  - G. Legal
  - H. Other
  
3. What is your primary area of expertise?
  - A. Contracting/acquisition
  - B. Manufacturing/production
  - C. Accounting/audit
  - D. Pricing
  - E. Engineering
  - F. Research
  - G. Legal
  - H. Other
  
4. How many years of experience do you have in your area of expertise?
  - A. 5 years or less
  - B. 6-10 years
  - C. 11-15 years
  - D. 16-20 years
  - E. 20+ years

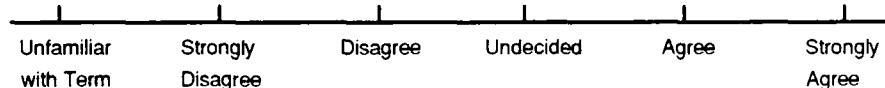
## **Agency-Peculiar Property**

Government-owned personal property that is peculiar to the mission of one agency, including end items and integral components of military weapons systems along with related peculiar support equipment, but excluding government material, special test equipment, special tooling and facilities. Agency peculiar equipment may be provided to a contractor as government-furnished property (GFP) for use in contract performance when it is necessary (1) for use as a standard or model, (2) for testing the contractor's end item where suitable commercial equipment is not available, (3) to establish equipment compatibility, or (4) for other reasons that the contracting officer determines to be in the Government's interest

Synonym: Agency Peculiar Property, Related Support Equipment, Peculiar Support Equipment.

Antonym: Common Support Equipment; Common Item(s).

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

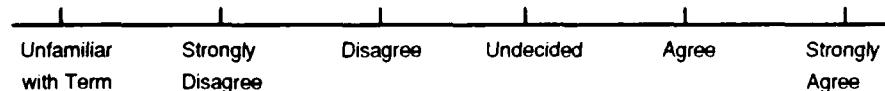
## **Architect-Engineering (A&E) Contract**

A two-phased, government contract for professional architect-engineer (A-E) services, subject to, (1) special source selection procedures required by the Brooks Act, and (2) a statutory limitation on total compensation--or "fee."

Synonyms: None.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

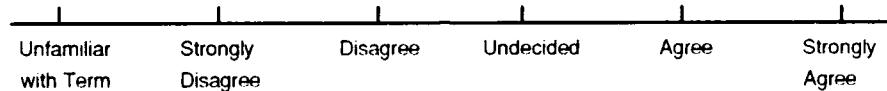
## **Co-development**

An international collaboration to which more than one government contributes efforts or resources during the development phase of a major weapon system program.

Synonyms: Collaborative Development, Compensatory Trade Agreement, Cooperative Development, Cooperative Research and Development Program with One or More Allied Nations, Joint Project, Joint Venture.

Antonyms: Joint-Service Development, Service-Unique Development, Agency-Peculiar Development.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

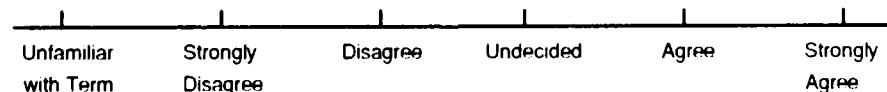
## **Concept Exploration**

The period, known as "Phase 0," at the beginning of a weapon system's life cycle, generally limited by time and budget, during which comprehensive system studies and experimental hardware efforts are accomplished to evaluate and define the feasibility of alternative concepts and provide the basis for assessing their relative merits at the Milestone I decision point.

Synonyms: Concept Exploration Phase, Concept Exploration/Definition Phase, Phase 0

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

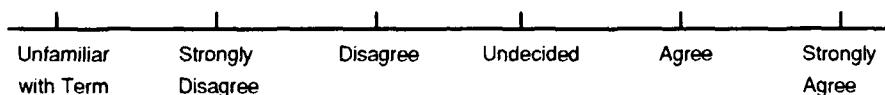
## **Consent to Subcontract**

The contracting officer's written consent for the prime contractor to enter into a particular subcontract when the subcontract work contemplated is complex, the dollar value is substantial, or the Government's interest is not adequately protected by competition and the type of prime contract or subcontract.

Synonyms: Advance Notification, Consent Requirement, Contractor Purchasing System Review.

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

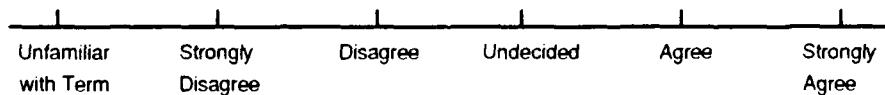
## **Contract Advisory and Assistance Services (CAAS)**

Services, other than those specifically excluded or exempted that will support or improve agency policy development, decision making, management, and administration, or support or improve the operation of management systems. Such services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance.

Synonyms: Advisory and Assistance Services, Contractor Advisory and Assistance Services, Contracted Advisory and Assistance Services, Contract Advice and Assistance Services.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

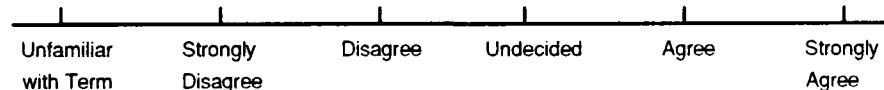
## **Cost/Schedule Control Systems Criteria (C/SCSC)**

A set of 35 criteria used as minimum standards to evaluate the effectiveness of a contractor's internal policies, procedures and methods with regard to cost and schedule control of a government contract. The C/SCSC do not specifically require any data to be reported to the government, but they do provide for access needed to evaluate the system and monitor its operation during the life of the contract. C/SCSC are required in selected cost type Major Defense Acquisition Program (MDAP) contracts and typically flow down to major MDAP subcontractors.

Synonyms:      None

Antonyms:      None.

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

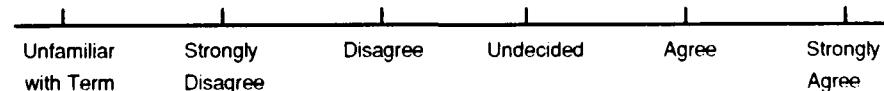
## **Economic Production Rate**

The most economically feasible rate at which an end item can be manufactured.

Synonyms:      Economic Production Quantity

Antonyms:      Accelerated Production Rate

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

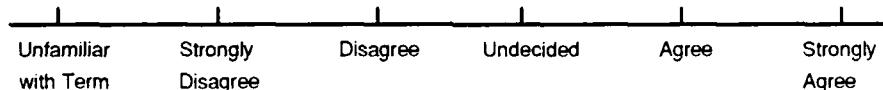
## **Demonstration and Validation**

The second period in the acquisition cycle of weapon system, known as Phase I, during which major program characteristics are refined through extensive study and analysis, hardware development, test and evaluation (including, where warranted, multiple design approaches and parallel technologies). The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into full scale development (FSD). The term is applicable to both Program Element Officer (PEO) Programs and Designated Acquisition Commander (DAC) contract actions.

Synonyms: Concept Demonstration/Validation., Demonstration/Validation, Demonstration and Validation Phase, Phase I.

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

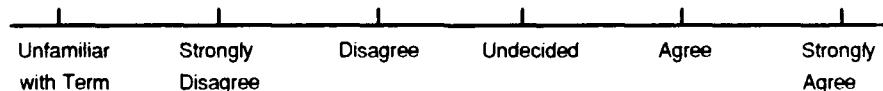
## **Economic Purchase Quantity**

That quantity of an item, identified by offerors, at which a significant price break occurs. It is one of many data points used by inventory managers in establishing and evaluating economic order quantities for supplies under their cognizance.

Synonyms: None.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

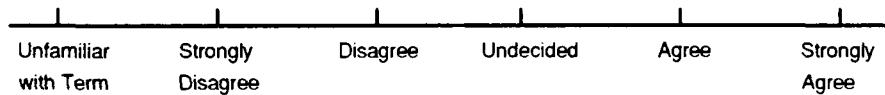
## **Design/Technical Competition**

A phrase sometimes used to denote competition for ideas and technologies in the early developmental stages of a major weapon system life cycle leading to a stable system design. Early competitive exploration of alternatives in the form of *competitive system design concepts* is encouraged in order to foster innovation and conceptual competition from industry. Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk.

Synonyms: Alternative System Design Concepts, Competition for Ideas and Technologies, Competitive Alternative Development and Production, Competitive Parallel Short-term Studies, Competitive Prototyping, Competitive System Design Concepts, Multiple Design Approaches and Parallel Technologies

Antonyms: Single System Design Concept, Sole Source Design/Technology, Use of "proprietary" or "noncompetitive" in relation to translating the user's needs into alternative concepts and a stable system design.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

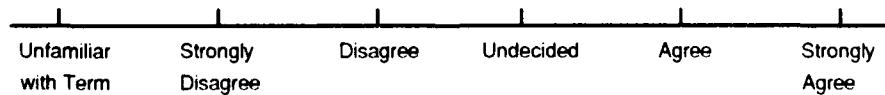
## **Excess Reprocurement Costs**

Any excess costs incurred by the government to repurchase supplies or services similar to those terminated for default.

Synonyms: Excess Costs of Reprocurement, Defaulted Contractor's Liability for Excess Costs.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Documentation**

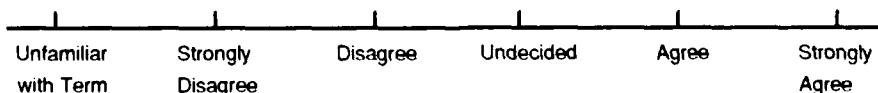
Recorded technical data or special knowledge or concepts:

- *General* - from which information can be derived. Examples: technical reports, a page containing data, a graphical or pictorial representation; a tape recording, a book, or a film record; packing lists, historical records; and diagrams of electrical and hydraulic systems and utility connections.
- *Computer Software* - including computer listings and printouts, that (1) documents the design or details of computer software, (2) explains the capabilities of the software, (3) provides data for testing the software, or (4) provides operating instructions.
- *Configuration Management* - established when the applicable configuration baseline is established, including both current and historical information to ensure traceability from the initial baseline.
- *Contractual* - maintained in a contract file which supports the acquisition action being taken or evidences compliance with statutes, regulations and policies. Examples: Price Negotiation Memorandum (PNM); Purchase Request (PR); Acquisition Strategy; and Acquisition Plan; and files maintained for historical support until a contract is closed out.
- *Financial and Accounting* - provided or maintained in support of financial and property transactions. Examples: summary and backup data to support a cost estimate; files maintained for historical support until a contract is closed out; accounting and voucher payment documents; documents to be reviewed by the Inspector General (IG); and rates of change required in PNMs.
- *Legal* - written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for the purpose. Examples: contracts; contract files; accounting records; and other documents of an evidentiary nature.
- *Management* - used in managing and reviewing a program. Required documents will vary for each review based on subject matter, program maturity; and, operational and developmental issues outstanding. Examples: Mission Needs Statement (MNS); Operational Requirements Document (ORD); and Acquisition Program Baseline (APB).
- *Policies and Procedures* - recorded or maintained to evidence compliance with applicable policies and procedures. Examples: a justification of weightings in the Source Selection Plan (SSP) or Price Negotiation Memorandum (PNM); a document justifying the exercise of an option or any limitation on an option price; and a determination of responsibility or nonresponsibility.
- *Technical Data* - for the purposes of allocating the rights of the contracting parties to the information.

Synonyms: Support, Evidence.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

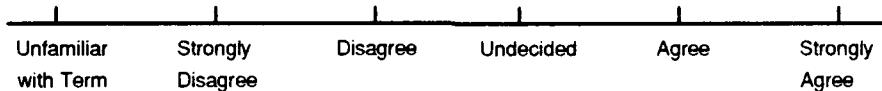
## **Educational Service Agreement (ESA)**

An ordering agreement, not a contract, under which the Government may order educational services.

Synonyms: None.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

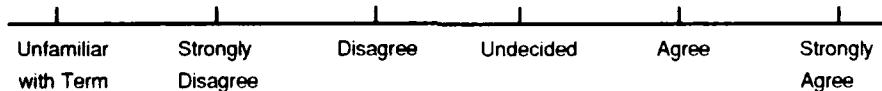
## **Fair and Equitable**

A term used to denote impartiality and reasonableness in the exercise of business judgment by government contracting officers in the performance of their official duties with regard to contractors.

Synonyms: Fair and reasonable.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

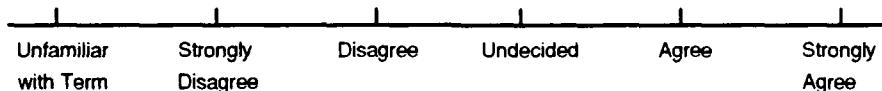
## **Fair and Reasonable Price**

A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance and also considering any applicable statutory, regulatory, or judgmental limitations.

Synonyms: None.

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

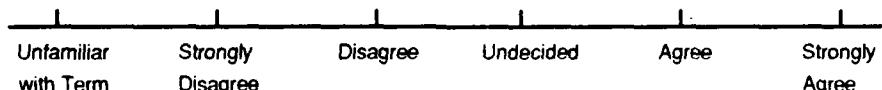
## **Greatest Value**

The most advantageous alternative to the Government, in the judgment of the contracting officer, over the system life in terms of price, cost, quality, performance, and any other relevant factors.

Synonyms: Most Advantageous Alternative

Antonyms: Low Price Offeror

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

## **Full Scale Engineering Development**

- The third period, known as "Phase 2," in a weapon system's life cycle, during which the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output includes a preproduction system that closely approximates the final product, the design documentation necessary to enter the production phase and the integrated logistics support documentation necessary to field and fully support the system, as well as test results that demonstrate that the production will meet stated requirements. Effective risk management is critical throughout this phase.

Synonyms: Full Scale Development, Engineering and Manufacturing Development, Phase 2.

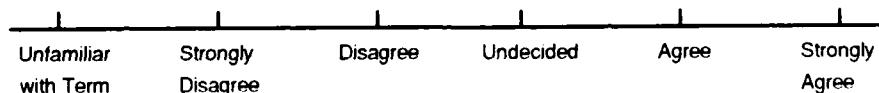
Antonyms: None.

- For Research & Development contracting, there is a distinction between "engineering development" and "operational development" as to the status of projects with regard to their approval to proceed into production and the availability of production funding in the applicable DoD budget submission. All items in this area are major line item projects which appear as RDT&E costs of weapons systems elements in other programs. Program control is exercised by review of the individual projects.

Synonyms: Engineering Development, Operational Development

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

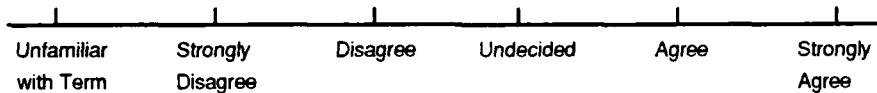
## **Government Furnished Information (GFI)**

Written knowledge, including documentation such as manuals, drawings, and test data or mapping, charting and geodesy property, which is in the possession of or directly acquired by the Government, and that is subsequently delivered or otherwise made available to the contractor.

Synonyms:     Government Property, Government Furnished Property (GFP) , Government Furnished Material (GFM), Government Furnished Data (GFD)

Antonyms:     Contractor Acquired Property (CAP), Contractor Furnished Equipment (CFE).  
                  Contractor Inventory

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

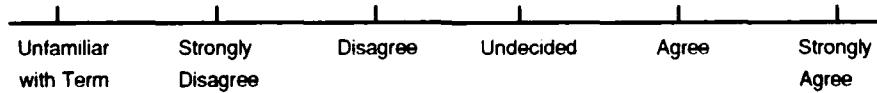
## **Pilot Production**

A period before full rate production begins, during which limited, initial quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production.

Synonyms:     First Article(s), Limited Production, Low Rate Initial Production

Antonyms:     Full Rate Production

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **License Agreement**

### **License Agreement, Construction:**

A regulatory requirement for construction contractors to bear the responsibility for obtaining necessary licenses and permits and complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of work on fixed-price construction or dismantling, demolition or removal-of-improvements contracts.

### **License Agreement, Foreign :**

A license covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licenses or the licensor

### **License Agreement, General:**

A privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a *license* is used. Any restrictions on use of the property must be set forth in the agreement to be enforceable.

### **License Agreement, Patents and Royalties:**

A legal document setting forth the rights and responsibilities of each party with regard to a patented product as well as the governing provisions on the payment of royalties to the owner of the patent.

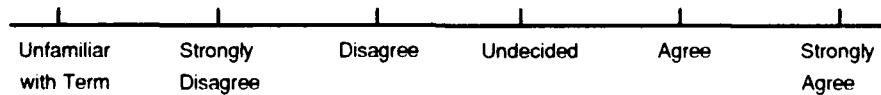
### **License Agreement, Rights in Technical Data and Computer Software:**

A license incorporated into a government contract setting forth the duties and responsibilities of the parties with regard to rights in technical data and/or computer software.

Synonyms:      Franchise, License, Exclusive License, Non-exclusive License.

Antonyms:      None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Long-Term Contracting**

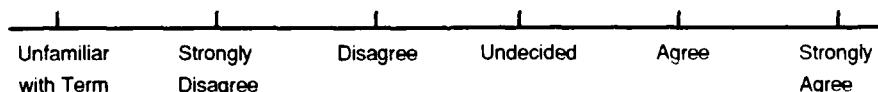
A method of contracting for required services and supplies over a period of 10 or more years. It is used:

- to sponsor Federally Funded Research & Development Centers (FFRDCs) when an FFRDC meets some special long-term research or development need, integral to the mission and operation of the sponsoring agency, which cannot be met as effectively by existing in-house or contractor resources;
- by GSA in the acquisition of utility services for periods not to exceed 10 years;
- as a way of adding production lots to existing contracts. This method is generally non-preferred because of the likelihood of significant pricing risks to both parties and increased management uncertainty over an extended period, as well as additional complexities introduced where contracts contain a mix of research and development (R&D) and production; and/or
- for management and operating contracts where the work is closely related to the agency's mission and is of long-term or continuing nature, and there is a need (1) to ensure its continuity and (2) for special protection covering the orderly transition of personnel and work in the event of a change in contractors.

Synonyms: Utility Services Contracting, Facilities Contracting, FFRDC Contracting

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Material Requirements Planning**

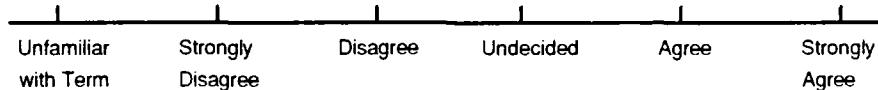
A computerized priority planning and controlling technique based on the quantity and timing requirements of materials whose use is directly dependent on the scheduled production of a larger component or finished product. It is a time-phased explosion of the master production schedule, intended to minimize safety stock or buffer inventories by utilizing bills-of-material and inventory status dates to calculate:

- What parts are needed and whether they should be made or bought;
- How many parts are needed; and
- When the parts must be available to meet the schedule.

Synonyms: Manufacturing Resource Planning (MRP II), Inventory Planning

Antonyms: None.

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

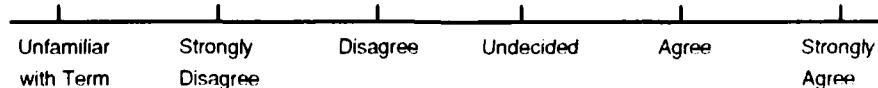
## **Materiel Management**

An integrated systems approach to the coordination of materials activities and the control of total materials costs which results in the assignment of the responsibility for all major activities that contribute to the cost of materials to a single operating department or coordinating group. These responsibilities normally include computing requirements, funding, budgeting, storing, issuing, cataloging, standardizing, and contracting functions as well as serving as a communications link among the military logistics functions.

Synonyms: Integrated Materiel Management, Inventory Control, Materiel Control, Materials Management, Supply Management

Antonym: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

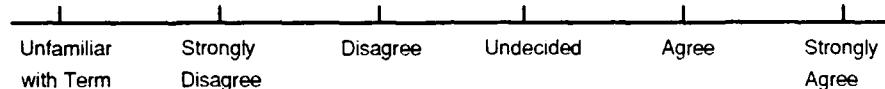
### **Non-Developmental Item (NDI)**

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace.

Synonyms:      Commercial Item, Commercial Off-the-Shelf (COTS), Off-the-Shelf

Antonym:      Developmental Item, Non-commercial Item

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Defining Acquisition Related Terms**

### **SURVEY B Table of Contents of Proposed Definitions**

Acquisition Planning .....	2
Baseline Cost Estimate .....	2
Acquisition Streamlining .....	3
Other Plant Equipment .....	3
Allocated Baseline .....	4
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Contractor Inventory .....	5
Industrial Plant Equipment .....	5
Functional Baseline .....	6
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Plant Clearance Officer .....	8
Product Baseline .....	8
Provisioning .....	9
Rule 4 File .....	10
Section 8(a) Contract .....	11
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NOTE: The page numbers listed above are those contained in the survey as it was sent to the survey population. For the purposes of this thesis, all pages, including the cover letter and the instructions, have been renumbered with a "B.2" prefix to indicate they are part of Appendix B.2

## **Appendix B.2: Survey B**

AFIT/LSP (Dr. Pursch)

Participation in Graduate Thesis Research

Dear Certified Professional Contracting Manager (CPCM):

Under the sponsorship of the National Contract Management Association (NCMA), graduate students at the Air Force Institute of Technology (AFIT) and the Naval Postgraduate School (NPS) are attempting to compile a dictionary of contracting terms to be used to enhance effective communication within the contracting profession. Working definitions of critical terms have been developed based on a review of current contracting literature. However, actual usage of each term within the environment of the workplace cannot be determined through such a review. Therefore, a survey of contracting professionals is being undertaken in order to ascertain the degree to which literature-based definitions correspond with actual usage.

The enclosed survey is being distributed to a randomly selected group of CPCMs. You are being asked to respond by giving your expert opinion concerning the accuracy and completeness of selected literature-based definitions. Because the survey is being sent to a relatively small number of experts, it is important that each recipient complete and return it. Your participation is greatly encouraged.

Your responses to this survey will remain confidential. Each questionnaire has been assigned an identification number for mailing purposes. This will enable your name to be checked off when your questionnaire is returned. However, your name will not be associated with your responses.

For your convenience in returning the completed survey, a stamped, pre-addressed envelope is enclosed. Should you have any questions about the purpose or completion of the survey, please feel free to call Mr. Rick Zigman at (513) 434-4962.

Thank you for your assistance. Remember - your participation is important!

Sincerely,

WILLIAM C. PURSCH, Ph.D., CPCM  
Professor of Contracting Management  
School of Systems and Logistics

2 ATCH  
1. Questionnaire  
2. Envelope

## **Survey B**

### **INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE**

This questionnaire contains proposed definitions of 27 contracting terms. The purpose of this questionnaire is to survey contracting professionals to ascertain the level of their concurrence with the proposed definitions.

To complete this questionnaire, please:

Circle the rating that best describes your level of agreement with the proposed definition; and

Provide any additional comments/suggestions you have regarding the proposed definition, as well as any synonyms or antonyms you feel are appropriate.

**PLEASE SUBMIT YOUR RESPONSES BY 16 APR 1993.**

Your assistance is appreciated.

Rick Zigman  
AFIT/LAA  
2950 P Street  
Wright-Patterson AFB OH 45433-7765

## **Background Information**

1. Where are you presently employed?
  - A. Government contracting activity
  - B. Commercial contracting activity
  - C. Academic institution
  - D. Other
  
2. What is the primary activity of your current job position?
  - A. Contracting/acquisition
  - B. Manufacturing/production
  - C. Accounting/audit
  - D. Pricing
  - E. Engineering
  - F. Research
  - G. Legal
  - H. Other
  
3. What is your primary area of expertise?
  - A. Contracting/acquisition
  - B. Manufacturing/production
  - C. Accounting/audit
  - D. Pricing
  - E. Engineering
  - F. Research
  - G. Legal
  - H. Other
  
4. How many years of experience do you have in your area of expertise?
  - A. 5 years or less
  - B. 6-10 years
  - C. 11-15 years
  - D. 16-20 years
  - E. 20+ years

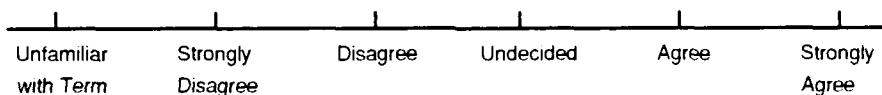
## **Acquisition Planning**

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. Acquisition Planning includes developing the overall strategy for managing the acquisition. The strategy considers such factors as: mission needs, funding, alternatives, choice of procurement method, source competence, competition, source selection, delivery, government-furnished property, possible follow-on requirements, and contract administration. Acquisition Planning should begin as soon as a requirement is identified.

Synonyms: Procurement Planning, Advance Acquisition Planning

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

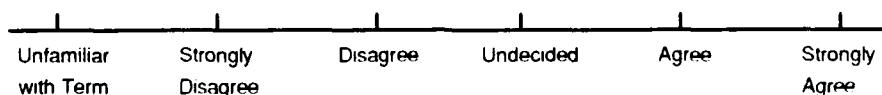
## **Baseline Cost Estimate**

The first detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is performed early in the program and serves as the base point for all subsequent tracking and auditing purposes.

Synonyms: None

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

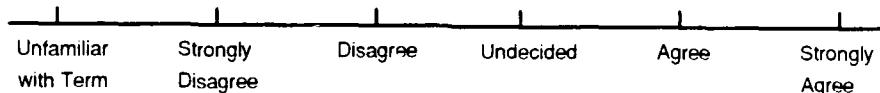
## **Acquisition Streamlining**

Any effort that results in more efficient and effective use of resources to design, develop, produce, and deploy quality systems and products. This includes ensuring that only necessary and cost effective requirements are included, at the most appropriate time, in solicitations, standards, and contracts for the design, development, production, and deployment of new systems, or for modifications to existing systems that involve redesign of systems or subsystems. The objective of acquisition streamlining is to reduce the time and cost required for an acquisition and to improve the quality of those systems by tailoring requirements to meet acquisition needs.

Synonyms: Procurement Streamlining, Streamlining

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

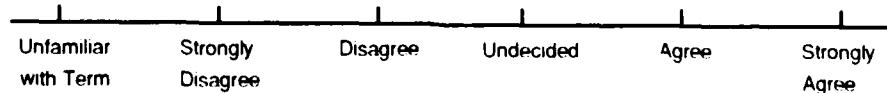
## **Other Plant Equipment**

That part of plant equipment regardless of dollar value, which is used in, or in conjunction with, the manufacture of components or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as Industrial Plant Equipment (IPE).

Synonyms: None

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

## **Allocated Baseline**

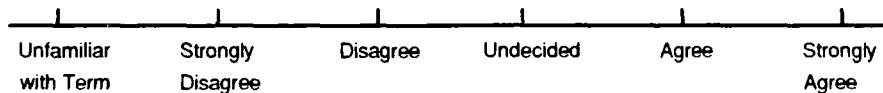
The second of three baselines are generally considered in configuration management. The other two are functional and product baselines. The allocated baseline begins as the system specification is expanded and refined. Contractor specifications are prepared for all new configurations. These development specifications define the allocated baseline for a system's Allocated Configuration Items (ACI).

An ACI, which is the allocated baseline plus approved changes, normally consists of a series of type B specifications defining the functional requirements for each major Configuration Item (CI). These may be supplemented by other type of specifications, engineering drawings and related data, as necessary to specify: (1) all essential CI functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic.

Synonyms: None

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

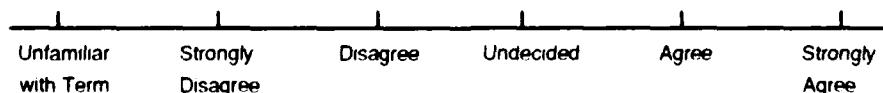
## **Progress Payments Inventory**

That property acquired by the contractor to which the Government has a vested interest solely through FAR 52.232-16, Progress Payment Clause provisions.

Synonyms:

Antonyms:

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

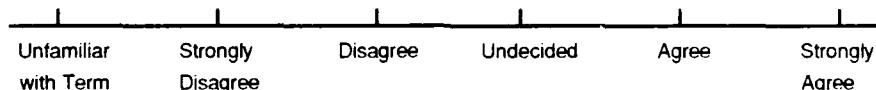
## **Contractor Inventory**

1. Any property that the Government is obligated to, or has the option to, take over, under any type of contract, as a result, either of any changes in the specifications or plans thereunder or, of the termination of the contract (or subcontract thereunder), prior to completion of the work, for the convenience or at the option of the Government.
2. Any property acquired by and in the possession of a contractor or subcontractor (including Government-furnished property) under a contract, pursuant to the terms of which, title is vested in the Government, and in excess of the amounts needed to complete full performance under the entire contract.

Synonyms: None

Antonyms: None

### **DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

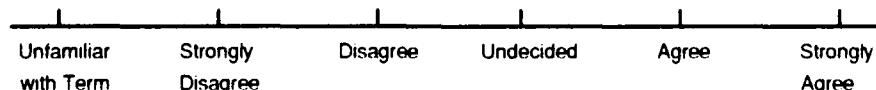
## **Industrial Plant Equipment**

Plant equipment in Federal Stock Group 34, with an acquisition cost exceeding a specified level, used for cutting, abrading, grinding, shaping forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or Research & Development operations.

Synonyms: None

Antonyms: None

### **DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

## **Functional Baseline**

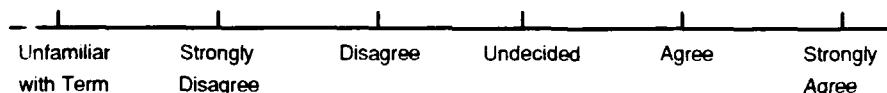
The first of three baselines generally considered in configuration management. The other two are allocated and product baselines. Baselines provide the basis for contracting and controlling system design. The functional baseline is defined by the system specification prepared during the concept exploration phase which defines the functional baseline for the system Functional Configuration Items (FCI).

The FCI which is the functional baseline plus approved changes, will normally include a type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic.

Synonyms: None

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

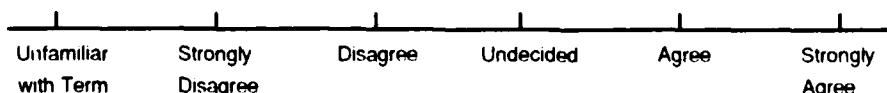
## **Property Administrator**

An authorized representative of the Contracting Officer (CO) assigned to administer contract requirements and obligations relating to Government property.

Synonyms: None

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

## **Office of Federal Procurement Policy (OFPP)**

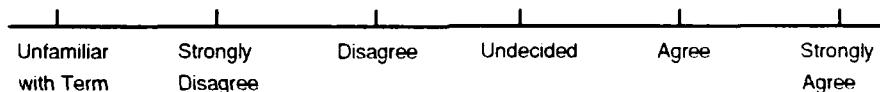
An organization, created in 1974, within the Office of Management and Budget (OMB), responsible for providing overall executive branch guidance, leadership, and direction of Government procurement policy and regulations to be followed by executive agencies in acquiring goods, services, and facilities.

The OFPP leadership role in the procurement process entails, among other things, chairing the Federal Acquisition Regulatory (*FAR*) Council, providing for GSA's Federal Procurement Data System (FPDS), providing for a Federal Acquisition Institute (FAI) at GSA, consulting with agencies (including the Small Business Administration (SBA)), developing innovative procurement methods and procedures to be tested by selected executive agencies, issuing policy letters including conflict-of-interest standards for individuals providing consultant services, establishing and maintaining the Cost Accounting Standards (CAS) Board, and serving as advocate for the acquisition of Commercial Products.

Synonyms: None

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

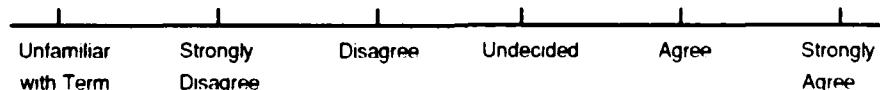
## **Rights In Technical Data**

There are three basic types of rights which apply to technical data delivered under contract to the government. See Unlimited Rights, Limited Rights, and Government Purpose License Rights.

Synonyms:

Antonyms:

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

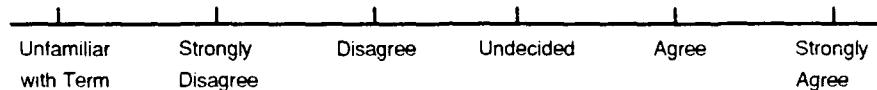
## **Plant Clearance Officer**

The plant clearance officer is responsible for all actions relating to the screening, redistribution, and disposal of contractor inventory from a contractor's plant or work site. This includes executing sales contracts and contracts incident to the removal of Government property and excess and surplus contractor inventory from contractor's plants. The term "contractor's plant" includes Government owned contractor-operated (GOCO) facilities. The contracting officer assigns these responsibilities to the plant clearance officer.

Synonyms: None

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

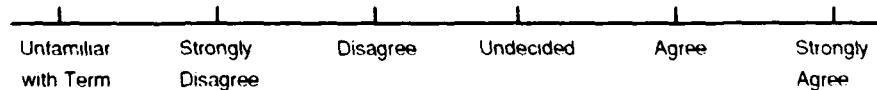
## **Product Baseline**

The third of the three baselines generally considered in configuration management. The other two are functional and allocated baselines. The product baseline is established prior to the commencement of production as a set of minimum system performance requirements that must be met by the system in production in order to satisfy the specified system operational requirements. This baseline is the basis for control during the production and operational periods.

Synonyms: None

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Provisioning**

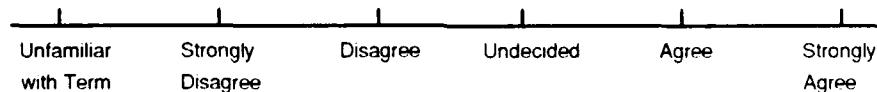
The process of determining and acquiring the range and quantity of spare and repair parts, special tools, test equipment, and support equipment necessary to operate, support, and maintain an end item or material for a set period of service. Its phases include the identification of items of supply; the establishment of data for catalog, technical manual and allowance list preparation; and, the preparation of instructions to assure delivery of necessary support items with related end articles.

1. The provisioning process begins at the time a production contract is awarded for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.
2. Specific types of provisioning are; initial provisioning, follow-on provisioning, and reprovisioning. Initial provisioning is the first time provisioning for a new end item. Follow-on provisioning is a subsequent provisioning of the same end item from the same contractor. Reprovisioning is a subsequent provisioning of the same end item from a different contractor.
3. Provisioning normally does not include the acquisition of support items for replenishment purposes or for augmentation of existing stocks of items already established in the wholesale supply system.

Synonyms: Outfitting

Antonyms: Replenishment of Spares

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

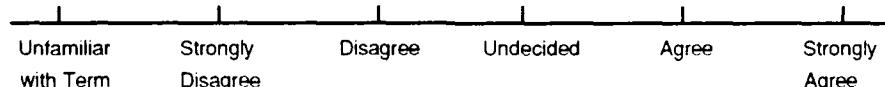
## **Rule 4 File**

A file containing all pertinent information in a dispute including: the contracting officer's (CO) final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Board of Contract Appeals (BCA). The Rule 4 procedure pertains only to BCA appeals and not to litigation before the U.S. Claims Court. The CO is required, within 30 days of receipt of the complaint (appeal), to assemble and distribute the Rule 4 File to the BCA and the contractor. The contractor has the opportunity to supplement the file within 30 days of its receipt. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings. Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. The Rule 4 File is also called the appeal file or the protest file in protests before the General Services Administration Board of Contract Appeals (GSBCA).

Synonyms: Appeal File, Protest File, Discovery

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

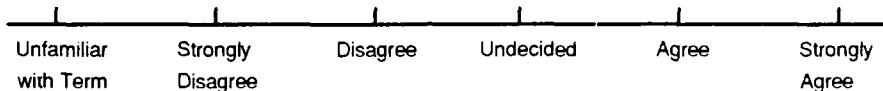
## **Section 8(a) Contract**

A contractual arrangement, under section 8(a) of the Small Business Act, 15 U.S.C. 637(a), wherein the Small Business Administration (SBA) is authorized to enter into contracts with government procuring agencies and to award subcontracts for performing those contracts to firms eligible for 8(a) program participation. The arrangement may also take the form of a tripartite agreement among the above parties to provide required supplies or services to the Government. An 8(a) contract may not be awarded if the price of the contract results in a cost to the contracting agency which exceeds its fair market value.

Synonyms: 8(a) Contract

Antonyms: None

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

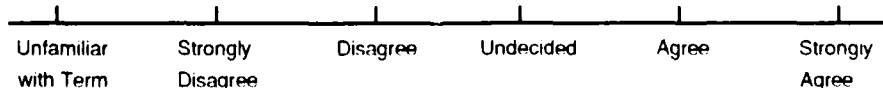
## **Single Source**

The only known source able to perform a contract, or the one source among others that, for justifiable reason, is judged to be most advantageous to the Government for the purpose of contract award. A sole or single source acquisition means a contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source.

Synonyms: Sole Source

Antonyms: Competition, Competitive Acquisition

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

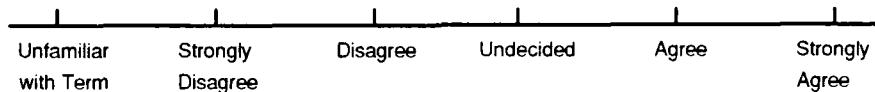
## **Substantial Performance**

A doctrine that recognizes the contractor's performance when slight, trivial, or minor deviations from the terms of an agreement occur. The Government shall pay the contractor the amount obligated under contract, less damages which result from any deviation from the promised performance. The Government is prohibited from terminating the contract for default if substantial performance exists. Three conditions must be present in order to conform with the substantial performance doctrine. First, the contractor must have made a good faith attempt to perform to the contract requirements. Second, results of the contractor's endeavor must be beneficial to the government. Finally, benefits must be retained by the government.

Synonyms: Substantial Compliance, Substantial Completion

Antonyms: None.

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

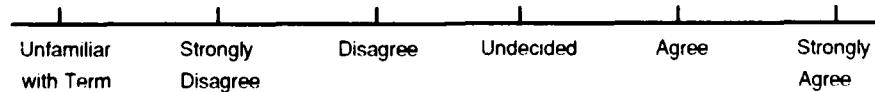
## **Government Purpose License Rights**

Contractually specified rights to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Such rights are valid for a stated period of time. The Government is entitled to unlimited rights after the such time period expires.

Synonyms:

Antonyms:

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

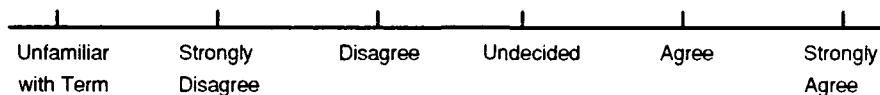
## **Product Assurance**

A discipline which assures that all critical activities are identified; that resources are developed for each activity; and that these resources are applied to each project to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

Synonyms:

Antonyms:

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

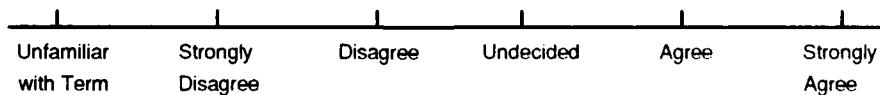
## **Risk Management**

The organized process of planning, identifying, and measuring risks; then developing, selecting, and managing options for resolving these risks. Risk drivers such as technical, supportability, programmatic, cost, and schedule factors should be considered and managed at all phases of a system's life cycle.

Synonyms:

Antonyms:

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

## **Product Substitution**

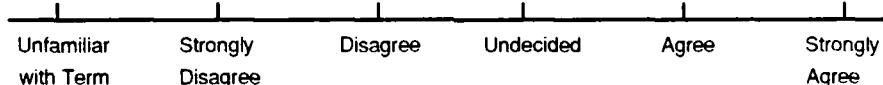
Attempts by contractors to deliver to the Government goods or services which do not conform to contract requirements while seeking reimbursement based upon delivery of allegedly conforming products or services. If the contractor delivers a nonconforming good or service, the contractor must advise the Government of the fact to prevent product substitution from occurring.

Examples of conditions under which product substitution may be alleged to occur include: 1) substitution of another item for a contractually required item; 2) replacement of a domestic required item with an item from a foreign source; 3) replacement of a contractually specified skilled worker with a lower skilled worker; 4) nonperformance of contractually required tests or situations where such tests are not performed as prescribed; and, 5) submission of contractually required reports containing incomplete, inadequate, or false material by a contractor.

Synonyms:

Antonyms:

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

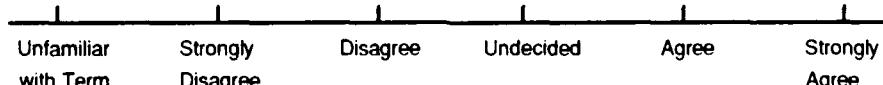
## **Risk Analysis**

An examination of risk areas or events to determine options and the probable consequences for each event in the analysis. Such areas can be computed using complex models, expert opinions, or intuitive judgment.

Synonyms:

Antonyms:

**DO YOU AGREE WITH THIS DEFINITION?**



COMMENTS:

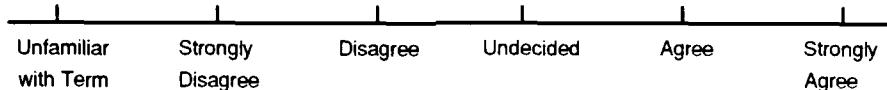
## **System Specification Baseline**

A baseline, more commonly known as the functional baseline, agreed upon by the contractor and the government that establishes the system level specification which defines a system's technical, performance, design, or mission requirements.

Synonyms: Functional Baseline

Antonyms: None

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

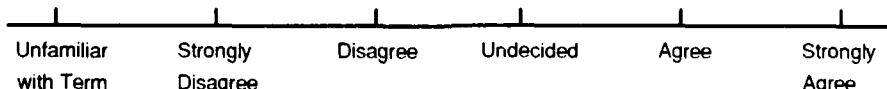
## **Unpriced**

A term used to denote an action that requests or commits the contractor to provide an item or service, but does not, at the time of issuance, establish a definite price for that item or service. Examples of unpriced actions include letter contracts, undefinitized contractual action, and unpriced purchase orders.

Synonyms:

Antonyms:

DO YOU AGREE WITH THIS DEFINITION?



COMMENTS:

## **Work Measurement Standards**

A method for evaluating efficiency by defining typical or "standard" hours to perform a task and comparing them to actual time used. The comparisons are used to compute efficiency and performance or realization factors. The term standard, in work measurement, is applied to any established or accepted rule, model, or criterion against which comparisons are made.

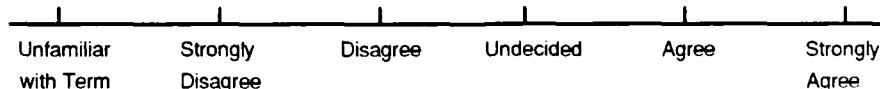
Labor time standards are composed of the time allowed for a normally skilled worker following a prescribed method and working at a normal all-day level of effort, to complete a defined task with acceptable quality plus allowances. Allowances include time for personal time, fatigue, and minor, unavoidable, and unpredictable delays that are not under the workers control. MIL-STD 1567A recognizes two types of work measurement standards:

- Type I (*engineered*) standards are established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard.
- Type II (*estimated or non-engineered*) standards are those not meeting the criteria for Type I and are usually determined by estimates based on experience or historical data.

Synonyms:

Antonyms:

**DO YOU AGREE WITH THIS DEFINITION?**



**COMMENTS:**

## **Appendix C: Follow-up Letter**

AFIT/ LSP (Dr. Pursch)

### **Participation in Graduate Thesis Research**

Dear Certified Professional Contracts Manager:

About four weeks ago, you were sent a questionnaire concerning the definitions of acquisition related terms. To date, your completed questionnaire has not been received.

The results of the survey will be used to establish consensus definitions of the contracting terms it addresses. To this end, you, as a recognized expert in the contracting field, have been requested to give your input. Since the survey has been sent to only a small sample of CPCMs, each response is important. Although comments are helpful, if your time is limited, marking the rating scale associated with each definition would suffice.

In the event that your questionnaire has been misplaced, a replacement, along with a stamped, pre-addressed reply envelope, is enclosed.

Your time and assistance are greatly appreciated.

Sincerely,

**WILLIAM C. PURSCH, Ph.D., CPCM**  
Professor of Contracting Management  
School of Systems and Logistics

3 ATCH  
1. Cy Ltr, 2 Apr 93  
2. Questionnaire  
3. Envelope

## Appendix D.1

### Survey A Raw Data

#### KEY

0 = Unmarked	4 = Undecided
1 = Unfamiliar with Term	5 = Agree
2 = Strongly Disagree	6 = Strongly Agree
3 = Disagree	

TERM	0	1	2	3	4	5	6
Agency-Peculiar Property (APP)	8	17	2	4	6	50	10
Architect-Engineer (A-E)Contract	6	18	4	7	9	44	9
Co-Development	5	18	1	12	6	51	4
Concept Exploration	5	15	0	2	3	56	16
Consent to Subcontract	6	1	1	15	3	54	17
Contract Advisory & Assistance Services (CAAS)	7	23	0	4	6	49	8
Cost/Schedule Control Systems Criteria (C/SCSC)	5	5	2	5	6	64	10
Demonstration & Validation	7	10	0	5	1	61	13
Design/Technical Competition	6	11	1	3	9	57	10
Documentation	9	1	6	6	9	55	11
Economic Production Rate (EPR)	7	3	1	11	3	52	20
Economic Purchase Quantity (EPQ)	5	1	1	6	6	58	20
Educational Service Agreement (ESA)	6	37	1	6	6	38	3
Excess Costs of Reprocurement	7	0	2	14	7	50	17
Fair and Equitable	6	2	5	8	6	51	19
Fair and Reasonable Price	6	0	2	10	1	59	19
Full Scale Engineering Development (FSED)	6	7	0	3	7	61	13
Government Furnished Information (GFI)	7	1	1	7	4	62	15
Greatest Value Survey Results	7	2	1	10	6	53	18
License Agreement	6	10	1	3	9	58	10
Long-Term Contracting	6	26	0	4	10	44	7
Material Requirements Planning (MRP)	6	9	0	4	6	57	15
Materiel Management	6	5	0	5	4	66	11
Non-Developmental Item (NDI)	6	9	0	5	4	63	10
Pilot Production	7	6	0	6	2	64	12

## Appendix D.2

### Survey B Raw Data

#### KEY

0 = Unmarked	4 = Undecided
1 = Unfamiliar with Term	5 = Agree
2 = Strongly Disagree	6 = Strongly Agree
3 = Disagree	

TERMS	0	1	2	3	4	5	6
Acquisition Planning	9	0	1	3	3	49	23
Acquisition Streamlining	11	1	1	6	11	42	16
Allocated Baseline	12	31	0	1	10	32	2
Baseline Cost Estimate (BCE)	7	2	1	7	7	55	9
Contractor Inventory	11	3	6	21	12	30	5
Functional Baseline	10	23	0	0	9	40	6
Government Purpose License Rights (GPLR)	11	10	0	6	14	43	4
Industrial Plant Equipment	6	16	0	4	12	43	7
Office of Federal Procurement Policy (OFPP)	7	1	0	5	6	55	14
Other Plant Equipment	8	8	0	4	13	45	10
Plant Clearance Officer (PLCO)	11	6	1	2	6	53	9
Product Assurance	7	9	1	5	14	46	6
Product Substitution	14	5	3	11	7	42	6
Progress Payment Inventory	9	9	1	4	8	46	11
Property Administrator	10	3	0	6	4	44	21
Provisioning	9	5	0	7	6	48	13
Rights in Technical Data	9	2	3	14	2	50	8
Risk Analysis	10	0	1	1	6	63	7
Risk Management	9	1	1	3	5	58	11
Rule 4 File	8	20	1	3	5	42	9
Section 8(A) Contract	11	2	0	6	4	56	9
Single Source	10	0	5	16	4	42	11
Substantial Performance	9	4	1	4	7	56	7
System Specification Baseline	9	15	1	1	7	48	7
Unpriced	10	0	1	8	2	52	15
Work Measurement Standards	13	7	0	1	4	54	9

## **Appendix E: List of Changes**

### **Additions, Deletions, and Modifications to the Terms Researched for this Thesis**

#### **Changes Made During the Literature Review:**

<b>Term</b>	<b>Status</b>	<b>See Page #</b>	<b>New Title</b>
Government Purpose Rights	Added	2-57	N/A*
Industrial Plant Equipment	Added	2-59	N/A
Experience Curve	Deleted	2-54	N/A
Prudent Business Person	Deleted	2-70	N/A
Z-Factor	Deleted	2-84	N/A
Initial Provisioning	Modified	2-67	Provisioning
Procurement Planning	Modified	2-60	Acquisition Planning

#### **Changes Made During Data Analysis:**

<b>Term</b>	<b>Status</b>	<b>See Page #</b>	<b>New Title</b>
Engineering & Manufacturing Development (EMD)	Added	4-49	N/A
Contractor Inventory	Deleted	4-76	N/A
Unpriced	Modified	4-117	Unpriced Contractual Action

\* N/A = Not Applicable

## **Appendix F.1: Survey A Final Proposed Definitions**

### **Agency-Peculiar Property**

- In general, Government-owned personal property that is peculiar to the mission of one agency.
- As used in the Department of Defense (DoD), this term includes end items and integral components of military weapons systems along with related peculiar support equipment, but excludes government material, special test equipment, special tooling and facilities. Such items may be provided to a contractor as government-furnished property (GFP) for use in contract performance when it is necessary
  - (1) for use as a standard or model,
  - (2) for testing the contractor's end item where suitable commercial equipment is not available,
  - (3) to establish equipment compatibility, or
  - (4) for other reasons that the contracting officer determines to be in the Government's interest

Synonyms: Peculiar Support Equipment, Military Property, Space Property, Government Furnished End Item(s).

Antonyms: Common Support Equipment; Common Item(s), Contractor Owned Property.

### **Architect-Engineering (A-E) Contract**

A contract for professional services of an architectural or engineering nature associated with research, planning, development, design and/or construction, alteration or repair of real property or other services incidental thereto. In the Government, these contracts are subject to (1) special, statutory, two-phased selection and negotiating procedures based on rank order of technical qualifications, and (2) a statutory limitation on total compensation or "fee."

Synonyms: Design Engineering Services Contract.

Antonyms: None.

## **Co-development**

1. In the private sector, joint projects or ventures entered into by agreement between two or more parties to develop or build a new product or to develop new capabilities or uses for an existing product.
2. Often used in the Department of Defense to denote an international collaboration to which more than one government contributes efforts or resources during the development phase of a major weapon system program.

Synonyms: Cooperative Development, Collaborative Development.

Antonyms: None.

## **Concept Exploration**

1. The process of refining a proposed concept and reducing the concept's technical uncertainties.

Synonyms: None.

Antonyms: None.

2. In the Department of Defense, the period at the beginning of a weapon system's life cycle, during which comprehensive system studies and, possibly, experimental hardware efforts are accomplished. Used to evaluate and define the feasibility of alternative concepts and provide the basis for assessing their relative merits at the first milestone decision point.

Synonyms: Concept Exploration Phase, Concept Exploration/Definition Phase, Phase 0.

Antonyms: None.

## **Consent to Subcontract**

The contracting officer's written consent for the prime contractor to enter into a particular subcontract when (1) the subcontract work contemplated is complex, (2) the dollar value is substantial, or (3) the Government's interest is not adequately protected by competition and the type of prime contract or subcontract.

Synonyms: None.

Antonyms: None.

## **Contract Advisory and Assistance Services (CAAS)**

Services, other than those specifically excluded or exempted by statute, regulation or policy, that will support or improve agency policy development, decision making, management, and administration, or support or improve the operation of management systems. Such services may take the form of information, advice, opinions, alternatives, conclusions, recommendations, training, or direct assistance.

Synonyms: Advisory and Assistance Services, Contractor Advisory and Assistance Services, Contracted Advisory and Assistance Services, Contract Advice and Assistance Services.

Antonyms: None.

## **Cost/Schedule Control Systems Criteria (C/SCSC)**

A set of criteria used as minimum standards to evaluate the effectiveness of a contractor's internal policies, procedures and methods with regard to cost and schedule control of a government contract. The C/SCSC do not specifically require any data to be reported to the government, but they do provide for access needed to evaluate the systems and monitor their operation during the life of the contract. Specific data requirements are found on associated Contract Data Requirements Lists (CDRLs). In the Department of Defense, C/SCSC are required in selected cost type Major Defense Acquisition Program (MDAP) contracts and typically flow down to major subcontractors.

Synonyms: None.

Antonyms: None.

## **Demonstration and Validation**

The second period in the acquisition cycle of a weapon system, during which major program characteristics are refined through extensive study and analysis, hardware development, test and evaluation (including, where warranted, multiple design approaches and parallel technologies). The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into Engineering and Manufacturing Development (EMD) (formerly titled Full Scale Development (FSD) or Full Scale Engineering Development (FSED)).

Synonyms: Concept Demonstration/Validation, Demonstration/Validation, Demonstration and Validation Phase, Phase I.

Antonyms: None.

## **Design/Technical Competition**

1. A term denoting competition for ideas and technologies in the early developmental stages of a major weapon system life cycle leading to a stable system design. Early competitive exploration of alternatives in the form of *competitive system design concepts* is encouraged in order to foster innovation and conceptual competition from industry. Technology demonstrations and aggressive prototyping (including manufacturing process, hardware and software systems, and critical subsystems), coupled with early operational assessments are to be used to reduce risk

Synonyms: Alternative System Design Concepts, Competition for Ideas and Technologies, Competitive Alternative Development and Production, Competitive Parallel Short-term Studies, Competitive Prototyping, Competitive System Design Concepts, Multiple Design Approaches and Parallel Technologies.

Antonyms: Single System Design Concept, Sole Source Design/Technology.

2. A term employed to describe the competitive aspects of a "Request for Technical Proposal," in Step 1 of a "Two-Step" Sealed Bid procurement.

Synonyms: None.

Antonyms: None.

## **Documentation**

- The act or an instance of the supplying of documents or supporting references or records.
- The documents or references supplied.
- The collation, synopsizing and coding of printed material for future reference.
- The orderly presentation, organization and communication of recorded special knowledge to produce a historical record of changes in variables.

The multi-faceted nature of this term is illustrated below. It includes, but is not limited to, the following types of documentation, commonly used in Government contracting:

1. General Documentation - Recorded technical data or special knowledge or concepts, in any form, from which information can be derived. Examples: technical reports, a page containing data, a graphical or pictorial representation; a tape recording, a book, or a film record; packing lists, historical records; and diagrams of electrical and hydraulic systems and utility connections.

2. *Computer Software Documentation* - Recorded technical data or special knowledge or concepts including, but not limited to, computer listings and printouts, that (1) document the design or details of computer software, (2) explain the capabilities of the software, (3) provide data for testing the software, or (4) provide operating instructions. Such documentation must be in human-readable form (as distinguished from machine-readable).
3. *Configuration Management Documentation* - Recorded technical data or special knowledge or concepts established when the applicable configuration baseline is established, including both current and historical information to ensure traceability from the initial baseline to the latest configuration.
4. *Contractual Documentation* - Recorded technical data or special knowledge or concepts maintained in a contract file which supports the acquisition action being taken or evidences compliance with statutes, regulations and policies. Examples include, but are not limited to, such documents as: Price Negotiation Memoranda (PNM); Purchase Requests (PR); Acquisition Strategies; and Acquisition Plans; or files maintained for historical support until a contract is closed out.
5. *Financial and Accounting Documentation* - Recorded technical data or special knowledge or concepts provided or maintained in support of financial and property transactions. Examples include, but are not limited to, general ledger entries, summary and backup data to support cost estimates; files maintained for historical support until a contract is closed out; accounting and voucher payment documents; documents to be reviewed by the Inspector General (IG); and rates of change required in Price Negotiation Memoranda (PNMs).
6. *Legal Documentation* - Recorded technical data or special knowledge or concepts including, but not limited to written instruments, inscriptions, documents of all kinds, and also any inanimate objects admissible for a legal purpose. Examples: contracts; contract files; accounting records; and other documents of an evidentiary nature.
7. *Management Documentation* - Recorded technical data or special knowledge or concepts used in managing and reviewing a program. Required documents will vary for each review, based on subject matter, program maturity; and, operational and developmental issues outstanding. Examples include, but are not limited to, Mission Needs Statement (MNS); Operational Requirements Document (ORD); and Acquisition Program Baseline (APB).
8. *Policies and Procedures Documentation* - Recorded technical data or special knowledge or concepts, maintained to enforce and/or evidence compliance with applicable policies and procedures. Examples include, but are not limited to, information supporting the justification of weightings in a Source Selection Plan (SSP) or Price Negotiation Memorandum (PNM); a document justifying the exercise of an option or any limitation on an option price; or a determination of responsibility or nonresponsibility.

Synonyms: Support, Evidence.

Antonyms: None.

### **Economic Production Rate**

The rate at which a quantity of end items can be manufactured most economically. Usually measured in terms of the most efficient quantity for a production run given the capacity of the manufacturer.

Synonyms: None.

Antonyms: None.

### **Economic Purchase Quantity**

That quantity (or range of quantities) of an item, identified by an offeror, at which a significant price break occurs. It is one of many considerations used by those responsible for establishing and evaluating economic order quantities for supplies.

Synonyms: Quantity Discounts.

Antonyms: None.

### **Educational Service Agreement (ESA)**

An ordering agreement, not a contract, under which the Government may order educational services.

Synonyms: None.

Antonyms: None.

### **Excess Reprocurement Costs**

The difference between the original contract price and the cost to repurchase supplies or services that are the same as, or as similar as practicable to, those terminated for default. Includes other related costs and reasonable damages incurred by the purchaser.

Synonyms: Excess Costs of Reprocurement, Defaulted Contractor's Liability for Excess Costs, Cost of Cover.

Antonyms: None.

## **Fair and Equitable**

In government contracting, a term used to denote impartiality and reasonableness in the exercise of business judgment by contracting officers in the performance of their official duties with regard to contracting actions.

Synonyms: None.

Antonyms: None.

## **Fair and Reasonable Price**

A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance and also considering any applicable statutory, regulatory, or judgmental limitations.

Synonyms: None.

Antonyms: None.

## **Engineering and Manufacturing Development (EMD)**

The third period in a weapon system's life cycle, during which the system/equipment and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output includes a preproduction system that closely approximates the final product and the design documentation necessary to enter the production phase. It also includes integrated logistics support documentation necessary to field and fully support the system, as well as test results that demonstrate that the production will meet stated requirements.

Synonyms: Phase 2, (formerly known as Full Scale Development (FSD) or Full Scale Engineering Development (FSED)).

Antonyms: None.

## **Full-Scale Engineering Development (FSED)**

Pursuant to DFARS 235.001, "Research & Development (R&D) Contracting," this term is divided into two parts: "Engineering Development" and "Operational Development." These parts reflect the status of projects with regard to (1) their approval to proceed into production and (2) the availability of production funding in the applicable DoD budget submission. All items in this area are major line item projects which appear as RDT&E costs of weapons systems elements in other programs. Program control is exercised by review of the individual projects.

Synonyms: Engineering Development, Operational Development.

Antonyms: None.

### **Government Furnished Information (GFI)**

Written or recorded knowledge or data, including, but not limited to, documentation such as manuals, drawings, software and test data, or mapping, charting and geodesy property. Such information is normally in the possession of or directly acquired by the Government. It is subsequently delivered or otherwise made available to a contractor for use in connection with and under the terms of a Government contract.

Synonyms: Government Property, Government Furnished Property (GFP) , Government Furnished Material (GFM), Government Furnished Data (GFD).

Antonyms: Contractor Acquired Property (CAP), Contractor Furnished Equipment (CFE), Contractor Inventory.

### **Greatest Value**

The most advantageous alternative to the Government, in the judgment of the contracting officer, over the system life in terms of price, cost, quality, performance, and any other relevant factors.

Synonyms: Most Advantageous Alternative.

Antonyms: Low Price Offeror.

### **License Agreement**

A legal instrument granting permission to do a particular thing, to exercise a certain privilege, to carry on a particular business, or to pursue a certain occupation. When granted by an appropriate government body, licenses are permits allowing a person, firm or corporation to pursue some occupation or business, subject to regulation. Types of LICENSE AGREEMENTS commonly used in Government contracting include, but are not limited to,

1. License Agreement, Construction: A term used to denote a regulatory requirement for construction contractors to bear the responsibility for obtaining necessary licenses and permits and complying with any Federal, State and municipal laws, codes, and regulations applicable to the performance of work on fixed-price construction or dismantling, demolition or removal-of-improvements contracts.

2. *License Agreement, Exclusive*: A term used to denote a written instrument of understanding covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licensees or from the licensor. A "Non-Exclusive License" is a license as described above, except that competition may be permitted with other licensees or the licensor.
3. *License Agreement, General*: A term used to denote a written instrument that grants a privilege, revocable at will, to use the property of the licensor for a specified purpose and period of time. Generally, a permit is the proper instrument when the use of real property of another Federal agency is involved; in other cases a *license* is used. Any restrictions on use of the property must be set forth in the agreement to be enforceable.
4. *License Agreement, Patents and Royalties*: A legal document setting forth the rights and responsibilities of each party with regard to a patented product as well as the governing provisions on the payment of royalties, if required, to the owner of the patent.
5. *License Agreement, Rights in Technical Data and Computer Software*: A term used to denote a written instrument of understanding, incorporated into a government contract, setting forth the duties and responsibilities of the parties with regard to rights in technical data and/or computer software.

Synonyms: Franchise, License, Exclusive License, Non-Exclusive License, Direct License.

Antonyms: None.

### **Long-Term Contracting**

A method of contracting for required services and supplies over an extended period. It is used:

- to sponsor Federally Funded Research & Development Centers (FFRDCs), in accordance with FAR 35. Used when an FFRDC meets some special long-term research or development need, integral to the mission and operation of the sponsoring agency, which cannot be met as effectively by existing in-house or contractor resources. The term of the agreement will not exceed 5 years, but can be renewed, as a result of periodic review, in increments not to exceed 5 years;

- by GSA, in the acquisition of utility services for periods not to exceed 10 years, as set forth in FAR 8.3;
- as a way of adding production lots to existing Major Defense Acquisition Program (MDAP) Requests for Proposal (RFPs) and contracts. In this context, "extended period" means approaching or over 10 years. This method is generally non-preferred because of the likelihood of significant pricing risks to both parties and increased management uncertainty over an extended period, as well as additional complexities introduced where contracts contain a mix of research and development (R&D) and production; and/or
- for management and operating contracts, subject to the provisions of FAR 17.6, where the work is closely related to the agency's mission and is of long-term or continuing nature, and there is a need (1) to ensure its continuity and (2) for special protection covering the orderly transition of personnel and work in the event of a change in contractors.

Synonyms: Utility Services Contracting, Facilities Contracting, FFRDC Contracting.

Antonyms: None.

### **Material Requirements Planning**

A priority planning and controlling technique (usually computerized), based on the quantity and timing requirements of materials whose use is directly dependent on the scheduled production of a larger component or finished product. It is a time-phased explosion of the master production schedule, intended to minimize safety stock or buffer inventories by utilizing bills-of-material and inventory status dates to calculate:

- What parts are needed and whether they should be made or bought;
- How many parts are needed; and
- When the parts must be available to meet the schedule.

Synonyms: Manufacturing Resource Planning (MRP II), Inventory Planning.

Antonyms: None.

### **Materiel Management**

An integrated systems approach to the coordination of materials activities and the control of total materials costs. It results in assignment of the responsibility for all major activities that contribute to the cost of materials to a single operating department or coordinating group. These responsibilities normally include, but are not limited to, computing requirements, funding, budgeting, storing, issuing, cataloging, standardiz-

ing, and contracting/purchasing functions. In the Department of Defense, the department or coordinating group also serves as a communications link among the military logistics functions.

Synonyms: Integrated Materiel Management, Inventory Control, Materiel Control, Materials Management, Supply Management.

Antonym: None.

### **Non-Developmental Item (NDI)**

An item needed by the Government that does not require development. Such items include (1) any item of supply available in the commercial marketplace, (2) any previously developed item of supply in use by a department or agency of the United States, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement, (3) any item of supply described above that requires only minor modification in order to meet the requirements of the contracting agency, or (4) any item of supply currently being produced that does not meet the above requirements solely because it is not yet in use or is not yet available in the commercial marketplace.

Synonyms: Commercial Item, Commercial Off-the-Shelf (COTS), Off-the-Shelf.

Antonym: Developmental Item.

### **Pilot Production**

An initial production run, normally done before full rate production begins. Limited quantities of an item are produced to demonstrate the capability to effectively mass produce a required item for inventory using the same or similar tooling, methods and inspection techniques as will be used in the full production.

Synonyms: First Article(s), Limited Production, Low Rate Initial Production.

Antonyms: Full Rate Production.

## **Appendix F.2: Survey B Final Proposed Definitions**

### **Acquisition Planning (AP)**

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner, at a reasonable cost, with acceptable quality. ACQUISITION PLANNING includes developing the overall strategy for managing the acquisition. ACQUISITION PLANNING includes, but is not limited to, such factors as: mission needs, funding, technical considerations, contract type, source capability, competition, procurement method, government-furnished property, laws and regulations, possible follow-on requirements, and contract administration.

Synonyms: Procurement Planning, Advance Acquisition Planning, Acquisition Strategy Planning.

Antonyms: None.

### **Acquisition Streamlining**

Any effort that results in more efficient and effective use of resources to design, develop, produce, and deploy quality systems and products. The objective is to reduce the time and cost required for an acquisition and to improve the quality of those systems by tailoring requirements to meet acquisition needs. This includes, but is not limited to, ensuring that only value-added requirements are included, at the most appropriate time, in solicitations, standards, and contracts for the design, development, production and deployment of new systems, or for modifications to existing systems that involve redesign of systems or subsystems.

Synonyms: Procurement Streamlining, Streamlining.

Antonyms: None.

### **Allocated Baseline**

The second of three baselines generally considered in Configuration Management. The other two are functional and product baselines. The ALLOCATED BASELINE begins as the system specification is expanded and refined. Contractor specifications are prepared for all new configurations. These development specifications define the ALLOCATED BASELINE for a system's Allocated Configuration Items (ACI).

An ACI, which is the ALLOCATED BASELINE plus approved changes, normally consists of a series of Type B specifications defining the functional requirements for each major Configuration Item (CI). These may be

supplemented by other type of specifications, engineering drawings and related data, as necessary to specify: (1) all essential CI functional characteristics, including delineation of interfaces; (2) physical characteristics necessary to assure compatibility with associated systems, configuration items and inventory items; and (3) all of the tests required to demonstrate achievement of each specified functional characteristic.

Synonyms: None.

Antonyms: None.

### **Baseline Cost Estimate**

A detailed estimate of acquisition and ownership costs normally required for high level decisions. This estimate is frequently prepared early in the program and serves as the base point for all subsequent tracking and auditing purposes.

Synonyms: None.

Antonyms: None.

### **Functional Baseline**

The first of three baselines generally considered in Configuration Management. The other two are allocated and product baselines. The FUNCTIONAL BASELINE is defined by the system specification, prepared during the concept exploration phase, which defines the FUNCTIONAL BASELINE for the system Functional Configuration Items (FCI).

The FCI, which is the FUNCTIONAL BASELINE plus approved changes, will normally include a Type A system specification, or a Type B, product specification supplemented by other specification types as necessary to specify: (1) all essential configuration item functional characteristics; (2) necessary interface characteristics; (3) specific designation of the functional characteristics of key configuration items; and (4) all of the tests required to demonstrate achievement of each specified characteristic.

Synonyms: None.

Antonyms: None.

### **Government Purpose License Rights**

Contractually specified rights to use, duplicate, and disclose data in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only. Such rights are valid for a stated period of time.

Synonyms: None.

Antonyms: None.

### **Office of Federal Procurement Policy (OFPP)**

An organization, created in 1974, within the Office of Management and Budget (OMB), responsible for providing overall executive branch guidance, leadership, and direction of Government procurement policy and regulations to be followed by executive agencies in acquiring goods, services, and facilities.

Synonyms: None.

Antonyms: None.

### **Plant Equipment**

#### **a) Industrial Plant Equipment (IPE)**

Plant equipment in Federal Stock Group 34, with an acquisition cost exceeding a specified level, used for cutting, abrading, grinding, shaping, forming, joining, heating, treating, or otherwise altering the physical properties of materials, components, or end items entailed in manufacturing, maintenance, supply, processing, assembly, or Research & Development operations.

Synonyms: None.

Antonyms: None.

#### **b) Other Plant Equipment**

That part of plant equipment regardless of dollar value, which is used in, or in conjunction with, the manufacture of components and/or end items relative to maintenance, supply, processing, assembly or research and development operations; but excluding items categorized as Industrial Plant Equipment (IPE).

Synonyms: None.

Antonyms: None.

### **PLant Clearance Officer (PLCO)**

A government official, who is the authorized representative of the contracting officer responsible for all actions relating to the screening, redistribution, and disposal of specified excess and surplus Government-titled property and/or contractor-titled property from GOCO facilities. This individual is responsible for acceptance of inventory schedules submitted by the contractor in "Conventional" Plant Clearances, or performs verification tasks on completed schedules in "Modified" Plant Clearances.

Synonyms: None.

Antonyms: None.

### **Product Assurance**

A discipline which assures that all critical activities are identified; that resources are developed for each activity; and that these resources are applied to each activity to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

Synonyms: None.

Antonyms: None.

### **Product Baseline**

The third of the three baselines generally considered in Configuration Management. The other two are functional and allocated baselines. The PRODUCT BASELINE, created prior to the commencement of production, establishes a set of minimum system performance requirements that must be met by the system in production in order to satisfy the specified system operational requirements. This baseline is the basis for control during the production and operational periods.

Synonyms: None.

Antonyms: None.

### **Product Substitution**

Delivery to the Government of goods or services which do not conform to contract requirements, while seeking reimbursement based upon delivery of allegedly conforming products or services. If the contractor deliv-

ers a nonconforming good or service, the contractor must advise the Government of the fact to prevent product substitution from occurring.

Synonyms: None.

Antonyms: None.

### **Progress Payment Inventory**

That property acquired by the contractor under a government contract to which the Government has a vested interest through the Progress Payment Clause provisions (FAR 52.232-16) in the contract. Property, for the purposes of this definition, is that property as defined in FAR 52.232-16(d)(2).

Synonyms: None.

Antonyms: None.

### **Property Administrator**

1. In the Government, an authorized representative of the government Contracting Officer (CO) assigned to administer contract requirements and obligations relating to Government property.
2. In private industry, a contractor may use this term for an individual who, although not specifically authorized by a Contracting Officer, performs property-related administrative functions for the company.

Synonyms: None.

Antonyms: None.

### **Provisioning**

The process of determining and acquiring the range and quantity of spare and repair parts, special tools, test equipment, and support equipment necessary to operate, support, and maintain an end item of material for a set period of service. Its phases include the identification of items of supply; the establishment of data for catalog, technical manual and allowance list preparation; and, the preparation of instructions to assure delivery of necessary support items with related end articles.

- The PROVISIONING process begins at the time a production contract is planned for an end item of material, and continues through the period of time required to have support items shipped by manufacturers and suppliers.

- Specific types of PROVISIONING are; initial provisioning, follow-on provisioning, and reprovisioning. Initial provisioning is the first time provisioning for a new end item. Follow-on provisioning is a subsequent provisioning of the same end item from the same contractor. Reprovisioning is a subsequent PROVISIONING of the same end item from a different contractor.
- PROVISIONING normally does not include the acquisition of support items for replenishment purposes or for augmentation of existing stocks of items already established in the wholesale supply system.

Synonyms: Outfitting.

Antonyms: None.

### **Rights In Technical Data**

The body of rules, derived from statutes and regulations that are legally enforceable between the parties to a contract pertaining to technical data delivered under a contract. These rights are classified as government purpose license rights, limited rights, restricted rights, and unlimited rights.

Synonyms: None.

Antonyms: None.

### **Risk Analysis**

An examination of risk areas or events to determine options and the probable consequences for each area or event. Such areas or events can be analyzed using complex models, expert opinions, or intuitive judgment.

Synonyms: None.

Antonyms: None.

### **Risk Management**

The organized process of planning, identifying, and measuring risks; then developing, selecting, and managing options for mitigating these risks. Risk drivers such as technical, supportability, programmatic, cost, and schedule factors should be considered and managed at all phases of a system's life cycle.

Synonyms: None.

Antonyms: None.

#### **Rule 4 File**

A file containing all pertinent information in a dispute including: the Contracting Officer's (CO) final decision, the contract, pertinent correspondence, affidavits, and related information that is prepared pursuant to Rule 4 of the Rules of the Board of Contract Appeals (BCA). The Rule 4 procedure pertains only to BCA appeals and not to litigation before the Court of Federal Claims. The CO is required, within 30 days of receipt of the complaint (appeal), to assemble and distribute the RULE 4 FILE to the BCA and the contractor. The contractor has the opportunity to supplement the file within 30 days of its receipt. Rule 4 requires and encourages both parties to present relevant documents in support of their respective cases and facilitates the production of documents as an aid to further discovery. It operates as an automatic, first-round discovery order without eliminating customary discovery proceedings. Documents contained in the appeal file are considered, without further action by the parties, as part of the record upon which the BCA will render its decision. The RULE 4 FILE is also called the appeal file or the protest file in protests before the General Services Administration Board of Contract Appeals (GSBCA).

Synonyms: None.

Antonyms: None.

#### **Section 8(a) Contract**

A contractual arrangement (tripartite agreement), under section 8(a) of the Small Business Act, 15 U.S.C. 637(a), wherein the Small Business Administration (SBA) is authorized to enter into contracts to provide required supplies or services to government procuring agencies and to award subcontracts for performing those contracts to firms eligible for 8(a) program participation.

Synonyms: 8(a) Contract.

Antonyms: None.

#### **Single Source**

The one source among others, that, for justifiable reason, is judged to be most advantageous to the Government for the purpose of contract award. A SINGLE SOURCE acquisition means a contract for the purchase of supplies or services that is entered into or proposed to be entered into after soliciting and negotiating with only one source.

Synonyms: None.

Antonyms: Competition, Competitive Acquisition.

### **Substantial Performance**

A doctrine, usually applied to construction contracts, that recognizes the contractor's performance when slight, trivial, or minor deviations from the terms of an agreement occur. The Government pays the contractor the amount obligated under the contract, less damages which result from any deviation from promised performance. The Government is prohibited from terminating the contract for default if substantial performance exists. Three conditions must be present in order to conform with the SUBSTANTIAL PERFORMANCE doctrine. First, the contractor must have made a good faith attempt to perform to the contract requirements. Second, results of the contractor's endeavor must be beneficial to the government. Finally, benefits must be retained by the government.

Synonyms: Substantial Compliance, Substantial Completion.

Antonyms: None.

### **System Specification Baseline**

A baseline, more commonly known as the functional baseline, agreed upon by the contractor and the government that establishes the system level specification which defines a system's technical, performance, design, or mission requirements.

Synonyms: Functional Baseline.

Antonyms: None.

### **Unpriced Contractual Action**

A term used to denote an action that requests or commits the contractor to provide an item or service, but does not, at the time of issuance, establish a definite price for that item or service. An unpriced action establishes a ceiling or Not-to-Exceed (NTE) price until the final price is definitized. Examples of UNPRICED CONTRACTUAL ACTIONS include, but are not limited to, letter contracts and unpriced purchase orders.

Synonyms: None.

Antonyms: None.

## **Work Measurement Standards**

A method for evaluating efficiency by defining typical or "standard" hours to perform a task and comparing them to actual time used. The comparisons are used to compute efficiency and performance or realization factors. The term "standard", in work measurement, is applied to any established or accepted rule, model, or criterion against which comparisons are made.

Labor time standards are composed of the time allowed for a normally skilled worker following a prescribed method and working at a normal all-day level of effort, to complete a defined task with acceptable quality plus allowances. Allowances include time for personal time, fatigue, and minor, unavoidable, and unpredictable delays that are not under the worker's control. MIL-STD-1567A recognizes two types of work measurement standards:

- Type I (Engineered) standards are established using a recognized technique, such as time study, predetermined time system, standard data, or work sampling to derive at least 90% of the total time associated with the labor effort covered by the standard.
- Type II (Estimated or Non-Engineered) standards are those not meeting the criteria for Type I and are usually determined by estimates based on experience or historical data.

Synonyms: None.

Antonyms: None.

## Appendix G: List of Additional Unresearched Terms

- |  |  |
|--|--|
| 1. Accelerated Delivery  | 42. Anti-Kickback Act                                |
| 2. Accelerated Procedure                                       | 43. Anti-Trust Violations                            |
| 3. Acceptance (Implied)  | 44. Apparent Authority - See 'Agent Authority'       |
| 4. Acceptance Sampling   | 45. Appeal Notice                                    |
| 5. Accord and Satisfaction                                     | 46. Appropriation Bill - <i>Appropriation</i>        |
| 6. Accounting Entity   | 47. Arbitration                                      |
| 7. Accounting Period   | 48. Arbitrator                                       |
| 8. Accounting Principles Board (APB) - See 'FASB'              | 49. Armed Services Procurement Act                   |
| 9. Accounting System   | 50. Armed Services Procurement Regulation            |
| 10. Accrual Accounting   | 51. Assist Audit - <i>Audit</i>                      |
| 11. Acquisition Goals - See 'Goals of the Acquisition Process' | 52. Attrition  |
| 12. Acquisition Planning                                       | 53. Auction Techniques - <i>Auctioning</i>           |
| 13. Acquisition Program  | 54. Auditor  |
| 14. Acquisition Risk   | 55. Authority - See 'Agent Authority'                |
| 15. Action Plan  | 56. Authorization                                    |
| 16. Active Contract  | 57. Authorization Bill                               |
| 17. Activity Accounting - See 'Responsibility Accounting'      | 58. Automated Data Processing                        |
| 18. Actual Authority - See 'Agent Authority'                   | 59. Automatic Data Processing Equipment ADPE)        |
| 19. Adjusted Ceiling   | 60. Average Procurement Lead Time                    |
| 20. Adjusted Target  | 61. Avoidable Costs                                  |
| 21. Administrative Cost  | 62. Bailee   |
| 22. Administrative Lead Time                                   | 63. Based on Price                                   |
| 23. Advance Acquisition Contract - <i>Advance Acquisition</i>  | 64. Baselining - <i>Baseline</i>                     |
| 24. Advance Agreement  | 65. Bayh-Dole Trademark Amendment Act                |
| 25. Advance Buy  | 66. Best Value                                       |
| 26. Advance Payment  | 67. Bid Guarantee                                    |
| 27. Advance Payment Bond                                       | 68. Bid Sample                                       |
| 28. Advance Procurement Plan                                   | 69. Bilateral Contract - <i>Bilateral Agreement</i>  |
| 29. Advanced Development                                       | 70. Board of Contract Appeals (BCA)                  |
| 30. Affiliates   | 71. Bond   |
| 31. Affirmative Action Plan - <i>Affirmative Action</i>        | 72. Book Value                                       |
| 32. Agency   | 73. Boyle Rule - See 'Government Contractor Defense' |
| 33. Agency Procurement Request (APR)                           | 74. Brainstorming                                    |
| 34. Agent Authority  | 75. Break-even Point                                 |
| 35. Aging Schedule   | 76. Broker   |
| 36. Allocate   | 77. Brooks Act                                       |
| 37. Alternative Bid  | 78. Budget   |
| 38. Alternate Item   | 79. Budget Resolution                                |
| 39. Anticipated Reimbursement                                  | 80. Budget Variance                                  |
| 40. Anticipatory Profit  | 81. Budgeted Cost of Work Performed (BCWP)           |
| 41. Anticipatory Repudiation - <i>Anticipatory Breach</i>      | 82. Budgeted Cost for Work Scheduled (BCWS)          |

83. Bulk Funding  
 84. Burden Center - See 'Cost Center'  
 85. Byrd Amendment  
 86. Capital  
 87. Capital, Cost of  
 88. Capital Equipment  
 89. Cash Flow  
 90. Cause and Effect Diagram  
 91. Ceiling - *Ceiling Price*  
 92. Central Procurement Activity  
 93. Centralization of Purchasing  
 94. Certificate of Appointment  
 95. Certification of a Claim  
 96. Change in Scope  
 97. Change Proposal - See  
     'Engineering Change Proposal'  
 98. Changes Clause  
 99. Christian Doctrine  
 100. Civilian Agency Acquisition  
     Council  
 101. Claim Certification - See  
     'Certification of a Claim'  
 102. Claims Court  
 103. Clarification  
 104. Clause  
 105. Clayton Act  
 106. Closed Contract  
 107. Close-out  
 108. Closing Date  
 109. Code of Federal Regulation (CFR)  
 110. Collusion - *Collusive Bidding*  
 111. Color of Money  
 112. Commercial and Government  
     Entity (CAGE) Code  
 113. Commercial Sale  
 114. Commercial-type Items  
 115. Commission on Government  
     Procurement (COGP)  
 116. Common Cost - See 'Joint Cost'  
 117. Common Law  
 118. Commonality  
 119. Compensable Delays  
 120. Compensation Clause  
 121. Competition Advocate  
 122. Competitive Time - See  
     'Uncompensated Overtime'  
 123. Component Breakout  
 124. Comptroller General  
 125. Computer Aided Acquisition and  
     Logistics Support (CAALS)  
 126. Computer Aided Design/Computer  
     Aided Manufacturing  
     (CAD/CAM)  
 127. Concerted Refusals to Deal  
 128. Concurrent Inspection  
 129. Consensus Decision  
 130. Consequential Damages  
 131. Conservatism  
 132. Consignee  
 133. Consistency  
 134. Consolidated List of Debarred,  
     Suspended, and Ineligible  
     Contractors  
 135. Constant Year Dollars  
 136. Constraints  
 137. Constructive  
 138. Constructive Acceleration  
 139. Consulting Services  
 140. Contingent Fee  
 141. Continuing Resolution  
 142. Continuous Quality Improvement  
 143. Contra Proferentum  
 144. Contract Administration Office  
 145. Contract Audit - *Audit*  
 146. Contract Award - *Award*  
 147. Contract Bond  
 148. Contract Change Proposal (CCP) -  
     See 'Engineering Change Proposal'  
 149. Contract Claim  
 150. Contract Closeout - See 'Closeout'  
 151. Contract Cost  
 152. Contract Disputes Act  
 153. Contract Interpretation  
 154. Contract Pricing Proposal  
 155. Contract Requirements  
 156. Contract Schedule  
 157. Contract Type  
 158. Contract Work Hours & Safety  
     Standards Act  
 159. Contracting Activity  
 160. Contracting Office  
 161. Contracting Officer's Technical  
     Representative (COTR)  
 162. Contractor Cost Data Report  
 163. Contractor Financing  
 164. Contractor Inventory  
 165. Contractor Owned, Contractor  
     Operated (COCO)  
 166. Contractor Purchasing System  
     Review

167. Contractor Risk Assessment Guide (CRAG)  
 168. Control Chart  
 169. Control Limits  
 170. Convenience Termination  
 171. Conventional Arms Transfer  
 172. Cooperative Agreement  
 173. Cooperative Development  
 174. Cooperative Purchasing  
 175. Copeland Act  
 176. Coproduction, International  
 177. Copyright  
 178. Cost Account  
 179. Cost Accounting Standards Board (CASB)  
 180. Cost Center  
 181. Cost Contract - *Contract, Cost Reimbursement*  
 182. Cost Estimating  
 183. Cost of Capital - See 'Capital, Cost of'  
 184. Cost of Goods Sold  
 185. Cost-Plus-Percentage-of-Cost (CPPC) Contract  
 186. Cost Pool - See 'Cost Center'  
 187. Cost Principles  
 188. Cost Sharing Contract  
 189. Cost-Volume-Profit Analysis - See 'Breakeven Analysis'  
 190. Counteroffer  
 191. Court of Claims - See 'United States Court of Claims'  
 192. Critical Dependencies  
 193. Critical Design Review  
 194. Critical Item  
 195. Critical Path Method (CPM)  
 196. Critical Path Scheduling  
 197. Critical Subcontract  
 198. Critical Success Factors  
 199. Cumulative Discount - See 'Quantity Discount'  
 200. Current Year Dollars  
 201. Customer  
 202. Data Document Costs  
 203. Data Requirements Review Board (DRRB)  
 204. Data Rights Clause  
 205. Data Sheet - See 'Financial Accounting Data Sheet'  
 206. Davis-Bacon Act  
 207. Decentralization of Purchasing  
 208. Decision Support System  
 209. Deductive Change  
 210. Default Termination  
 211. Defect  
 212. Defective Pricing Action  
 213. Defective Specifications  
 214. Defense Acquisition Circular (DAC)  
 215. Defense Acquisition Regulation (DAR)  
 216. Defense Acquisition Regulation (ARC)  
 217. Defense Contract Audit Agency (DCAA)  
 218. Defense Federal Acquisition Regulation Supplement (DFARS)  
 219. Defense Logistics Agency (DLA)  
 220. Defense Priorities and Allocation System (DPAS)  
 221. Deferred Procurement  
 222. Deficit  
 223. Definite Quantity Contract  
 224. Deflated Hourly Rates - See 'Uncompensated Overtime'  
 225. Delay, Excusable  
 226. Delay, Government Caused  
 227. Delegation of Procurement Authority (DPA)  
 228. Delivery  
 229. Deposition  
 230. Descriptive Literature  
 231. Design Criteria  
 232. Desk Audit  
 233. Differing Site Conditions  
 234. Differing Site Conditions - Category I  
 235. Differing Site Conditions - Category II  
 236. Direct Allocation of Salary Costs - See 'Uncompensated Overtime'  
 237. Direct Costing  
 238. Direct Procurement  
 239. Discharge of a Contract  
 240. Discounted Hourly Rates - See 'Uncompensated Overtime'  
 241. Discussion  
 242. Disputes Clause  
 243. DOD Voluntary Disclosure Program - See 'Voluntary Disclosure Program'  
 244. Domestic End Product  
 245. Domestic Preference  
 246. Drug-Free Workplace

247. Economic Price Adjustment  
     (EPA) - *Economic Price Adjustment Case*  
 248. Economics  
 249. Economy  
 250. Elasticity of Demand  
 251. Electronic Data Interchange (EDI)  
 252. Electronic Funds Transfer  
 253. Electronic Mail (E-Mail)  
 254. Electronic Mailbox  
 255. Electronic Payments  
 256. Elements of a Contract  
 257. Elements of Cost  
 258. Encryption End Item  
 259. Engineering Data  
 260. Equal Access to Justice Act  
     (EAJA)  
 261. Equal Employment Opportunity  
     (EEO)  
 262. Established Government Sources  
 263. Estoppel  
 264. Evaluation Board  
 265. Evaluation Factors  
 266. Excess Personal Property  
 267. Exclusive License  
 268. Exculpatory Clauses  
 269. Expedited Procedure  
 270. Expert Systems  
 271. Expired Costs  
 272. Export Administration Regulation  
     (EAR)  
 273. Express  
 274. Express Authority - See 'Agent  
     Authority'  
 275. Extended Work Week - See  
     'Uncompensated Overtime'  
 276. Extraordinary Contractual Relief  
 277. Facilities Capital  
 278. Facilities Capital Cost of Money  
 279. Factfinding  
 280. Factory Burden - See 'Factory  
     Overhead'  
 281. Factory Overhead  
 282. Fair Labor Standards Act  
 283. Fast Payment Procedure  
 284. Fast Track Program  
 285. Federal Acquisition Circular  
     (FAC)  
 286. Federal Acquisition Institute (FAI)  
 287. Federal Acquisition Regulatory  
     Council (FARC)
288. Federal Assistance (Grants and  
     Cooperative Agreements)  
 289. Federal Courts Improvement Act  
 290. Federal Data Processing Centers  
     (FDPC)  
 291. Federal Information Resources  
     Management Regulation (FIRMR)  
 292. Federal Procurement Data Center  
     (FPDC)  
 293. Federal Procurement Regulations  
     (FPR)  
 294. Federal Property and  
     Administrative Services Act  
 295. Federal Register  
 296. Federal Specification or Standard  
 297. Federal Supply Schedule Program  
 298. Fiduciary  
 299. Field Contracting Activity  
 300. Final Decision  
 301. Financial Accounting  
 302. Financial Accounting Data Sheet  
 303. Financial Accounting Standards  
     Board (FASB)  
 304. Financial Data Addendum Sheet  
 305. Financing - See 'Contractor  
     Financing'  
 306. Finished Good Inventory  
 307. Firm Bid Rule  
 308. Fishbone Diagram  
 309. Fitness for Use  
 310. Fixed Price  
 311. Flexible Budget  
 312. Flow Chart  
 313. Flow Down  
 314. Force Majeure Clause  
 315. Foreign Corrupt Practices Act  
 316. Form, Fit and Function Data  
 317. Formal Advertising  
 318. Forward Buying  
 319. Forward Pricing  
 320. Fraud  
 321. Free on Board (FOB)  
 322. Freedom of Information Act  
     (FOIA)  
 323. Fringe Benefits  
 324. Full Disclosure  
 325. Full Time Accounting - See  
     'Uncompensated Overtime'  
 326. General Accounting Office  
 327. General Services Board of  
     Contract appeals (GSBCA)

- 328. Generally Accepted Accounting Principles (GAAP)
- 329. Goals of the Acquisition Process
- 330. Going Concern Concept
- 331. Government Caused Delay
- 332. Government Contractor Defense
- 333. Government Owned, Contractor Operated (GOCO)
- 334. Government Purpose License Rights (GPLR)
- 335. Governmental Accounting
- 336. Grace Commission
- 337. Gramm-Rudman-Hollings Balanced Budget & Emergency Deficit Control Act Grants
- 338. Gratuity
- 339. Green Time - See 'Uncompensated Overtime'
- 340. Gross National Product (GNP)
- 341. Guaranteed Loans - *Guarantee*
- 342. Hard Savings
- 343. Historical Cost
- 344. Idle Time
- 345. Immateriality - See 'Materiality and Immateriarity'
- 346. Implied Authority - See 'Agent, Authority'
- 347. Imply
- 348. Improvement Curve - *Experience Curve, Learning Curve*
- 349. Incidentals
- 350. Incremental Budget
- 351. Incremental Cost
- 352. Indemnification Clause
- 353. Index Numbers
- 354. Index of Federal Specifications Standards, and Commercial Item Descriptions - See 'Federal Specifications'
- 355. Indictment
- 356. Indirect Labor
- 357. Indirect Manufacturing Costs - See 'Factory Overhead'
- 358. Industrial Base
- 359. Industrial Specification
- 360. Inflation
- 361. Initial Product Inspection
- 362. Injunction
- 363. Insider Trading
- 364. Inspection Requirements
- 365. Integrated Logistics Support
- 366. Integration, Horizontal
- 367. Interdivisional Work Authorization (IDWA) - See 'Interorganizational Transfer'
- 368. Internal Control
- 369. International Traffic in Arms Regulation (ITAR)
- 370. Interorganizational Transfer
- 371. Inventoriable Cost
- 372. Investment Goods - See 'Capital'
- 373. Invitation for Bids (IFB)
- 374. Ishikawa Diagram (See 'Fishbone Diagram')
- 375. Jacket
- 376. Javits-Wagner-O'Day (JWOD)) Act
- 377. Job Order Cost System
- 378. Job Shop
- 379. Joint Cost
- 380. Joint Product Cost
- 381. Jurisdiction
- 382. Key Functional Characteristics
- 383. Kickbacks
- 384. Law of Agency - See 'Agency'
- 385. Level Unit Pricing
- 386. License - See 'Exclusive License'
- 387. Limitation of Cost Clause
- 388. Limitation of Funds Clause
- 389. Limited Production - See 'Low Rate Initial Production (LRIP)'
- 390. Loan Guarantees - See 'Guaranteed Loans'
- 391. Local Buying
- 392. Local Supplier
- 393. Long Lead Items
- 394. Low Rate Initial Production (LRIP)
- 395. "M" Account
- 396. Maintainability
- 397. Major Systems Acquisition - See 'OMB Management Reserve'
- 398. Manager, Key Functions of
- 399. Managerial Accounting - See 'Cost Accounting'
- 400. Mandatory Flow Down Clauses - *Flow Down Clauses*
- 401. Mandatory Source - See 'Established Government Sources'
- 402. Manufacturing Overhead - See 'Factory Overhead'
- 403. Manufacturing Technology

404. March-In Rights  
 405. Marginal Costing - See 'Direct Costing'  
 406. Market Division  
 407. Market Research  
 408. Master Solicitation  
 409. Matching Principle  
 410. Material Inspection & Receiving Report  
 411. Measuring Unit  
 412. Method of Procurement  
 413. Milestones  
 414. Military Specifications  
 415. Military Standards Requisitioning & Issue Procedures (MILSTRIP)  
 416. Miller Act  
 417. Mistake in Bid  
 418. Modem  
 419. Monopolization  
 420. Monopoly  
 421. Monopsony  
 422. Munitions List  
 423. Mutual Mistake  
 424. National Stock Number  
 425. Negotiated Ceiling  
 426. Negotiated Contract Cost  
 427. Non-Exclusive License - See 'Exclusive License'  
 428. Non-Probability Sampling - See 'Sampling'  
 429. Normal Costing  
 430. Normal Workweek  
 431. Notification Clause  
 432. No-Year Funding  
 433. Objectivity  
 434. Obligation Authority  
 435. Obligation of Funds  
 436. Office of Management and Budget (OMB)  
 437. Oligopoly  
 438. OMB Circular A-76  
 439. OMB Circular A-109  
 440. OMB Circular A-120  
 441. On-Line Inspection  
 442. Open End Contract  
 443. Open Market  
 444. Opportunity Cost  
 445. Order of Precedence  
 446. Organizational Conflict of Interest  
 447. Outyear  
 448. Outlays  
 449. Overtime  
 450. Overtime Premium  
 451. Packard Commission  
 452. Parametric Cost Estimating  
 453. Partial Payment  
 454. Payment - See 'Compensation Clause'  
 455. Pecuniary Liability  
 456. Performance  
 457. Performance Measurement Baseline  
 458. Performance Specification  
 459. Periodic Inventory Method  
 460. Perpetual Inventory Method  
 461. Personal Services Contract  
 462. Physical Configuration Audit (PCA)  
 463. Planning Estimate  
 464. Planning Factor  
 465. Point of First Receipt  
 466. Post-Award Orientation  
 467. Pre-Award Inquiry  
 468. Preproduction Inspection  
 469. Present Value of Future Cash Flows  
 470. President's Blue Ribbon Commission on Defense Management - See 'Packard Commission'  
 471. Price Fixing  
 472. Price Variance  
 473. Pricing Arrangement  
 474. Prime/Prime Contractor  
 475. Prime Cost  
 476. Prior Course of Dealing  
 477. Priority Ratings  
 478. Probability Sampling - See 'Sampling'  
 479. Procedural Support Data  
 480. Process  
 481. Process Capability Analysis  
 482. Process Costing  
 483. Procurement Authorization  
 484. Procurement Automated Source System (PASS)  
 485. Procurement, Categories of  
 486. Procurement Lead Time  
 487. Product Verification Inspection  
 488. Production Readiness Review (PRR)  
 489. Profit Center

490. Profit Objective  
 491. Profitability Accounting - See 'Responsibility Accounting'  
 492. Program Evaluation & Review Technique (PERT)  
 493. Program Manager (PM)  
 494. Proposal Evaluation  
 495. Proprietary Information - *Proprietary Data*  
 496. Provisioned Item  
 497. Purchase Description  
 498. Qualified Manufacturer's List (QML)  
 499. Qualified Product  
 500. Quantity Discount  
 501. Quantity Variance  
 502. Qui Tam Action  
 503. Rate Variance  
 504. Ratification  
 505. Reciprocity  
 506. Regular Dealer  
 507. Reliability  
 508. Renegotiation Board  
 509. Replevin  
 510. Requirements Contract  
 511. Requisition  
 512. Recission  
 513. Research & Development Contract  
 514. Responsibility Accounting  
 515. Responsible Contractor - *Responsibility*  
 516. Responsive - *Responsiveness*  
 517. Restricted Computer Software  
 518. Restricted Rights  
 519. Return on Investment (ROI)  
 520. Revenue Recognition and Realization  
 521. Robinson-Patman Act  
 522. Safety Stock  
 523. Sample Size  
 524. Sampling  
 525. Separable Cost  
 526. Service Contract  
 527. Service Contract Act  
 528. Settlement Proposal  
 529. Severable Contract  
 530. Sherman Anti-Trust Act  
 531. Shift Premium  
 532. Show Cause  
 533. Show Cause Letter  
 534. Shrinkage  
 535. Simplified Procedures  
 536. Small and Disadvantaged Business Utilization Specialist (SADBUS)  
 537. Small Business Act  
 538. Small Business Administration (SBA)  
 539. Small Business Innovation Research (SBIR) Program  
 540. Small Purchase Procedures  
 541. Socioeconomic Programs  
 542. Sole Source Acquisition  
 543. Source Data  
 544. Source Selection Plan  
 545. Spearin Doctrine  
 546. Split-off Point - See 'Joint Products Cost'  
 547. Spoilage  
 548. Standard Absorption Costing  
 549. Standard Cost  
 550. Standard Direct Costing  
 551. Standard Form (SF)  
 552. Standard Hours Allowed (earned or worked)  
 553. Standardization, Industrial  
 554. Static Budget  
 555. Statistical Process Control (SPC)  
 556. Statute  
 557. Statute of Limitations  
 558. Stevenson-Wydler Technology Innovation Act  
 559. Stockless Purchasing - See 'Systems Contract'  
 560. Subcontract Data Requirements List (SCDRL)  
 561. Subcontracting Management  
 562. Sunk Costs  
 563. Superior Knowledge  
 564. Supplier  
 565. Surplus  
 566. Surplus, Disposal of  
 567. Suspension  
 568. Suspension of Work Clause  
 569. System  
 570. System Acquisition Process  
 571. System Engineering  
 572. Systems Contract  
 573. Tailoring  
 574. Target Fiscal Year  
 575. Tax Accounting  
 576. Technical Data  
 577. Technical Data Package  
 578. Technical Factors  
 579. Technology Transfer

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|---|--|
| 580. Termination  | 602. United States Court of Claims                   |
| 581. Termination Claim  | 603. United States Supreme Court                     |
| 582. Termination Inventory  | 604. Unjust Enrichment                               |
| 583. Then-Year Dollars - See 'Current Year Dollars'                           | 605. Unrestricted Procurement                        |
| 584. Time Value of Future Cash Flow - See 'Present Value of Future Cash Flow' | 606. Variable Budget                                 |
| 585. Torncello Rule   | 607. Variance  |
| 586. Total Cost Basis   | 608. Variable Costing - See 'Direct Costing'         |
| 587. Trade Agreements Act   | 609. Visual Analysis                                 |
| 588. Trade Discount   | 610. Voluntary Disclosure Program                    |
| 589. Trade Secret   | 611. Voluntary Standard                              |
| 590. Transportation, Modes of   | 612. Wage and Classification                         |
| 591. Treasury Memorandum Account - See 'Account'                              | 613. Walsh-Healey Public Contracts Act               |
| 592. The 1207 Program   | 614. Warner Amendment                                |
| 593. Tying Agreements   | 615. Warrant   |
| 594. Uncompensated Overtime   | 616. Warranty, Express                               |
| 595. Unconscionability  | 617. Warranty, Implied                               |
| 596. Unexpired Cost   | 618. Weighted Average Cost Method                    |
| 597. Uniform Commercial Code (UCC)  | 619. Weighted Guidelines Method (WGM)                |
| 598. Uniform Contract Format  | 620. Whistleblower - See 'Qui Tam Action'            |
| 599. Unilateral Contract - See 'Bilateral Contract'                           | 621. Work-in-Process Inventory                       |
| 600. Unit Cost  | 622. Work Packages - <i>Work Breakdown Structure</i> |
| 601. United States Court of Appeals for the Federal Circuit                   | 623. Zero-Base Budgeting                             |

#### NOTES:

- NUMBERED TERMS appear in NCMA's recently published *Desktop Guide to Basic Contracting Terms*, which was compared to the "Complete List of Terms" used in earlier related theses, to identify additional contracting and acquisition related terms not subjected to validation by consensus.
- Terms in *italics*, following NUMBERED TERMS, appear on the original "master list" and are believed to be either synonymous with or related in some way to the NUMBERED TERMS as listed.
- Terms following NUMBERED TERMS, as part of the phrase, "See '\_\_\_\_\_';" are included in the *Desktop Guide*.

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<b>13. ABSTRACT (Maximum 200 words)</b>  <p>The purpose of this thesis is to provide clear and cogent operational definitions of contracting terms used in today's Federal acquisition environment. This thesis is the last of the current continuing series of research efforts sponsored by the National Contract Management Association (NCMA) with the common goal of creating a dictionary of contracting and acquisition related terms, validated by synthesizing information found in current literature into proposed definitions and surveying proven acquisition authorities for their agreement or comments, thereby arriving at a consensus as to their current usage. This research effort has been conducted by military and civilian Master's candidates at the Air Force Institute of Technology, Wright-Patterson AFB OH and the Naval Postgraduate School, Monterey CA. Survey participants were selected from a current list of Certified Professional Contract Managers (CPCMs) provided by NCMA. A secondary line of comparative research was pursued to identify additional unresearched contracting and acquisition related terms, which are listed in Appendix G and recommended as a basis for possible research in the future.</p>						<b>14. SUBJECT TERMS</b>  Keywords: Thesis, Acquisition, Contract, Definitions	<b>15. NUMBER OF PAGES</b> 334	
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